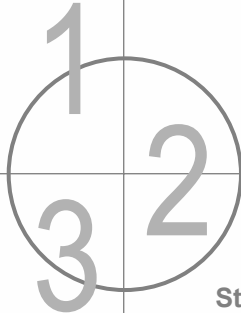


**STATE OF ALASKA**

Assessment



Strategy  
Development

Implementation  
Planning

# Statewide Information Technology Plan

October 31, 2002

October 31, 2002

State of Alaska  
Information Technology Group  
Attn: Andy Kline  
333 Willoughby Ave  
Juneau, AK 99811

Dear Andy:

Pacific Technologies, Inc. is pleased to present this final version of the *Statewide Information Technology Plan*. The plan documents the findings, analysis, and recommendations resulting from our work at the State, begun in February 2002.

As a result of additional comments from members of the Steering Committee, this version incorporates changes to the plan dated July 31, 2002.

We have provided 20 bound copies, 1 unbound copy, and an electronic copy of this deliverable.

I would like to take this opportunity to thank you, Larry Walsh, the project's steering team, and State of Alaska staff for all your efforts on this project.

Please call me at (425) 881-3991 if you have any questions about this deliverable.

Sincerely,

Mike Silverman  
Co-Chief Executive Officer  
Pacific Technologies, Inc.

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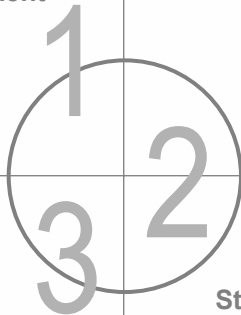
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# CHAPTER 1

Assessment



Strategy  
Development

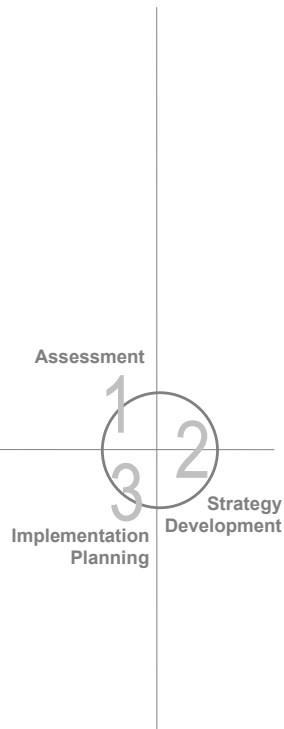
Implementation  
Planning

## executive summary

State of Alaska  
Statewide Information Technology Plan  
October 31, 2002

## STATEWIDE INFORMATION TECHNOLOGY PLAN

### Chapter 1: Executive Summary



## BACKGROUND

In early 2002, the State of Alaska (the State) engaged Pacific Technologies, Inc. to conduct a State-wide information technology (IT) strategic planning effort.

The State undertook this planning effort to understand how it can more efficiently and effectively utilize information technology, and to help determine a vision and direction for future enterprise IT activities.

The plan was managed out of the Information Technology Group (ITG) in the Department of Administration, and was led by a cross-organizational steering committee consisting of executive managers from many of the key departments across the State.

It is critical to understand that this planning effort presents a State-wide IT direction. While the project was administered by ITG, Pacific Technologies' efforts took input and direction from numerous State departments. In total, we directly contacted over 125 individuals while conducting this project.

The remainder of this chapter is organized as follows:

- ◆ Methodology
- ◆ Strengths
- ◆ Strategic IT Issues
- ◆ Major Recommendations
- ◆ IT Goal State: A Vision for the Future
- ◆ Projects, Costs, and Timing
- ◆ Conclusion

## METHODOLOGY

Pacific Technologies' approach to strategic technology planning examines four critical dimensions of IT:

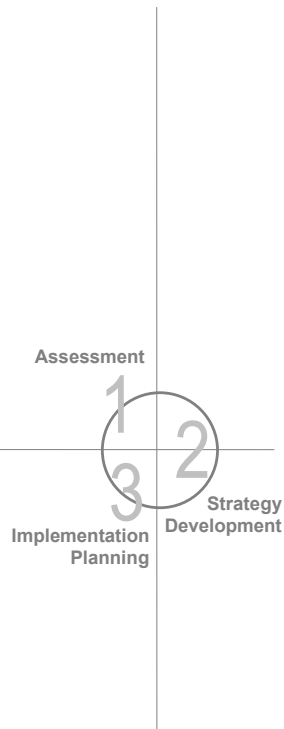
- ◆ **Service Delivery** – the IT organizational structure and staffing approach employed to support applications and infrastructure
- ◆ **IT Decision Making** – the processes and participants for making IT investment decisions
- ◆ **Applications** – the software used to support State business functions
- ◆ **Technical Infrastructure** – the hardware, networks, and system software deployed to support the applications

These four dimensions served as a common thread through the project's three major phases:

- ❶ **Assessment** – comprehensively evaluated the State's IT position across the four dimensions and identified major strategic IT issues that the plan must resolve
- ❷ **Strategy Development** – crafted strategic recommendations for addressing the State's principle IT challenges, leveraging the information collected in the assessment
- ❸ **Implementation Planning** – created a costed workplan describing projects needed to achieve the State's technology objectives, based on the strategies developed in the previous phase

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## STRENGTHS

Projects of this nature often tend to focus exclusively on areas of concern, disregarding positive elements that currently exist in an organization's IT environment. Pacific Technologies' assessment identified a variety of IT strengths worth noting and building upon, including:

- ◆ Skilled and capable IT personnel
- ◆ WAN and LAN infrastructures that are reliable and well-supported
- ◆ The establishment of an IT decision-making committee that involves the highest levels of State government
- ◆ A significant and innovative step toward public/private telecommunications partnership with Alaska Communications Systems (ACS)
- ◆ A technically sound data center maintained by ITG

## STRATEGIC IT ISSUES

Strategic IT issues identify the most important challenges this planning effort must address. Pacific Technologies' assessment identified the following key issues for the State of Alaska:

- ◆ **What are appropriate IT service delivery roles for:**
  - ITG?
  - Departments and divisions?
  - ACS?

The State's operational IT roles and responsibilities, distributed among the departments/divisions and ITG, have not historically been well-defined – and are presently in flux. With the advent of the State's telecommunications partnership with ACS, roles of the current players will require more clarification. As the State moves forward with substantial IT investments, it will be critical to determine appropriate IT service delivery responsibilities for ITG, the departments and divisions, and ACS.

### ◆ What major State-wide applications need investment?

The State's core enterprise software functionality (e.g., financial management, payroll, etc.) is provided through aging applications with dim prospects for future growth and viable support. Other critical areas (e.g., human resources management) significantly lack automated support. The State must determine the most effective approach for replacing or upgrading these enterprise systems.

### ◆ How can IT leadership and decision making better support future IT needs?

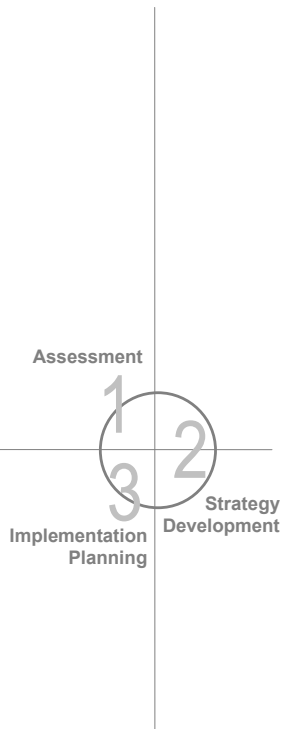
Alaska already has a key State-wide IT decision-making body in place: the Telecommunications Information Council (TIC). This group is composed of the Governor, the principle head of each executive branch agency, high level decision makers from the University and Legislative branches, and a member of the public. No full-time staff support the TIC in carrying out its duties of overseeing telecommunications activities across the State. The workload associated with this need will only become exacerbated in the face of increasing IT needs, expectations, and attendant issues. Additionally, it is worth noting that 40 out of 50 states have a cabinet-level position to provide leadership for State-wide IT strategic direction. The State does not currently have resource such as this. With a single focal point for State-wide IT leadership, the State could better address opportunities for cross-departmental cooperation and IT innovation on an enterprise-wide basis – reducing the possibility of redundant effort and unnecessary expense.

### ◆ What opportunities exist, if any, for realizing IT economies of scale?

The State would benefit from improved tools and channels for evaluating IT spending on an enterprise-wide basis. Alaska does not have a standard technology refresh cycle – an area that would likely provide opportunities for realizing economies of scale from a group purchasing perspective. Additionally, increased coordination on GIS efforts would better leverage base mapping efforts and associated data across the enterprise.

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◆ **How can the State most effectively utilize, classify, and develop IT staff in a challenging labor environment?**

Staff with key IT skills, needed to support the State's aging application environment, will soon be retiring from the workforce in significant numbers. Furthermore, several issues have led to many existing IT staff working outside their defined job classifications. Poor alignment between job classifications and staff responsibilities creates frustration for staff, and inhibits the State's ability to attract candidates possessing the requisite skills for a given position.

◆ **What can the State do to improve its approach to IT funding?**

The State's existing chargeback mechanisms for centrally-provided services are poorly understood by the departments and are not perceived to be meaningfully aligned with the services provided. Additionally, information technology replacement often occurs in an uncoordinated manner – sometimes as an afterthought – even though these tools (i.e., workstations, servers, mission-critical applications) are essential to key job functions. The State must work to clarify IT charges and develop a feasible approach to technology refresh.

◆ **How, and to what degree, should departmental IT initiatives align with the overall State-wide plan?**

Lack of coordination across divisions, between departments, and with State-wide efforts, results in lost opportunities and inefficiencies. Alaska needs an agreed-upon approach to identify departments' IT needs and improve attendant communication on a State-wide basis.

**MAJOR RECOMMENDATIONS**

To address the issues identified in the previous section, the following summarizes Pacific Technologies' primary strategic recommendations:

◆ **Create Dedicated Staffing for the TIC and Plan the Creation of an Office of the CIO**

*The State requires full-time, enterprise IT leadership. The Telecommunications Information Council (TIC) has served as a decision-making body for addressing occasional, specific IT questions. TIC membership, however, does not include any single individual who focuses solely on State-wide IT issues, nor does it possess staff dedicated to supporting its operation. As a result, the State is not reaping the benefits associated with best practices and has no single point of accountability for overall IT direction. In short, Alaska would benefit from a permanent, funded resource for setting and achieving State-wide IT strategy, and coordinating IT efforts across State entities.*

We recommend that the State create up to three permanent positions to support the activities of the TIC. These positions could be staffed by current ITG personnel, fully dedicated to TIC support. This approach will help ensure that the TIC is well-positioned to address the increasing complexity of telecommunications issues in a timely manner.

In addition to strengthening the capabilities of the TIC, we recommend planning for the creation of an Office of the Chief Information Officer (CIO). Led by a technology visionary and staffed with five to ten experts<sup>1</sup> in key fields (e.g., GIS, project management, procurement, etc.), this cabinet-level office will be responsible for driving the State's overall IT vision, and recommending and enforcing State-wide policies and procedures. It will also ensure that IT projects are well-coordinated, providing the State with the greatest benefit from its IT expenditures. As previously indicated, the current absence of a CIO does not align with best practices – 80% of the states in this country have a CIO providing State-wide IT leadership<sup>2</sup>.

◆ **Replace the State's major enterprise applications – Finance, Payroll, Human Resources, and Timekeeping**

*The State's existing enterprise applications (AKSAS, AKPAY, etc.) are old and in need of replacement. They cover only basic financial and payroll activities, leaving more advanced human*

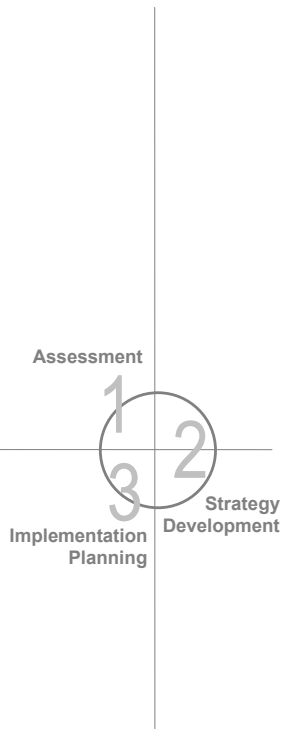
<sup>1</sup> Primarily transferred from ITG and other departments

<sup>2</sup> Appendix D provides a compilation of our research regarding trends for State CIOs.



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*resources and timekeeping functionality to largely manual efforts or local applications. Existing automation cannot support most of the more complex functions common in modern financial management systems (FMS) and human resources information systems (HRIS) software packages. In addition, the State's applications were developed years ago using technologies that require support skills which are becoming increasingly scarce in an already- challenging job market.*

This recommendation calls for the State to procure replacement FMS and HRIS applications to meet new functional requirements (e.g., compliance with GASB 34) and to provide improved efficiency to end users. The State should replace its budget system (ABS) in coordination with this procurement as well. While ABS is not outdated, the State will clearly benefit from the enhanced integration available by procuring a new budget module as part of a complete suite of financial management applications.

◆ **Develop departmental strategic IT plans**

*Currently, the State lacks a consistent approach to documenting the IT direction for individual departments and aligning technology-related strategies with overall business objectives. In some cases, departments have strategic plans for IT in place. On the whole, however, an opportunity for improved coordination exists within and between departments regarding strategic direction for IT.*

This recommendation calls for departments to develop their own IT strategic plans, following direction for content and objectives provided by the CIO and/or the TIC. Topics addressed by each departmental plan would include IT staffing, software, hardware, networking, IT funding and decision making, priority setting for IT investment, and alignment with State-wide direction.

◆ **Implement a technology refresh funding mechanism**

*Currently replacement of the State's information technology infrastructure occurs in a reactive manner. While some technologies are managed to ensure that replacement funds exist when the time for replacement comes, most are not. Instead, replacement occurs when funds become available or when the need becomes too acute to ignore. Moreover, while most departments expressed interest in pursuing some mechanism for*

*replacement funding, there is no direction regarding which replacement schedule would be appropriate for the various technologies – or what technologies should be subject to a standard replacement cycle. The result is a non-standard, often outdated equipment base that does not provide a sufficient foundation for current and future State-wide applications.*

This recommendation puts in place both the policy and the mechanism for refreshing the State's IT assets on a reasonable schedule. It appears that the Information Services Fund (ISF) could be used to accomplish this goal, although departmental details would need to be worked out – ideally within each departmental strategic IT plan. If the ISF could allow departments to determine their individual refresh timelines, and was independent of the ITG chargeback, it would work most effectively. If it cannot be used in this fashion, the State will need to create a new fund specifically targeted at technology refresh.

◆ **Invest in e-Government**

*The State has put a significant effort into providing services via the Internet. It has done so with a minimum of coordination or enterprise strategic direction. Accordingly, the State's online presence lacks indicators of common best practices for e-Government. These include unified "branding" and a single "look and feel" across the site, a "customer-centric" website organization that focuses on customer usage patterns and interests in lieu of enterprise organizational structures, and the use of a common development toolset to reduce support and implementation costs.*

This recommendation calls for the State to continue its efforts to realize the benefits of e-Government, but in a more coordinated manner. Accordingly, the State must develop standards for its Web presence, as well as the associated policies and procedures. In addition, the State needs to create an overarching Web architecture within which both departmental and State-wide Web development can grow. Finally, this recommendation calls for the State to invest in the tools and the assistance necessary to ultimately put forward a single, unified presence.

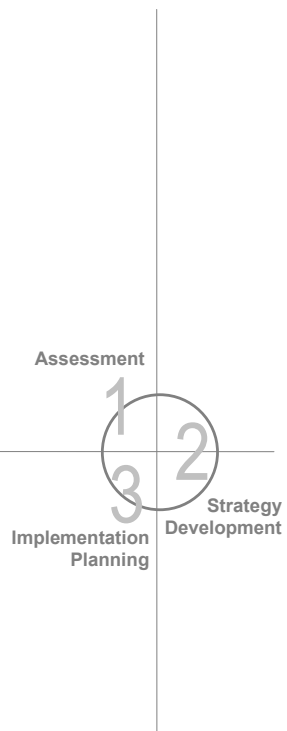
◆ **Implement an improved State-wide IT decision-making mechanism**

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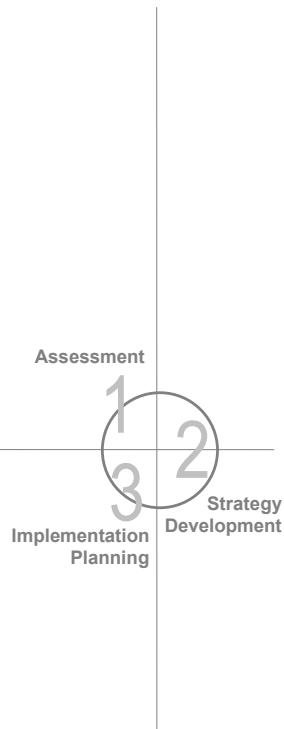
*During the assessment, Pacific Technologies conducted a workshop with the project's steering team that modeled the current decision-making process for IT investments. That effort identified several areas for improvement within the current process. Notably, while the TIC is comprised of high-level decision makers, these individuals have little time to devote to regular TIC meetings, impacting TIC effectiveness. In addition, without a CIO, the State lacks a single point of awareness and accountability for State-wide IT issues.*

In the strategy development phase, Pacific Technologies conducted a workshop with steering members to design a new process for making IT investment decisions. This new process, along with the roles and responsibilities for each of its participants, is presented in Chapter 3 of this document. The process incorporates the TIC (along with recommended staff), and is potentially chaired by the CIO. The presence of the CIO should facilitate an enterprise view of IT, and the recommended support staff will improve the TIC's ability to fulfill its charter.



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## IT GOAL STATE: A VISION FOR THE FUTURE

In a strategic planning workshop facilitated by Pacific Technologies, steering members developed an IT Goal State for the State of Alaska. This goal state represents a future vision for using IT across the enterprise. We employed the SMART criteria to guide the workshop, ensuring that the target is **Specific, Measurable, Agreed-upon, Realistic and Timely**. Steering members developed the following enterprise goal state for IT:

- ◆ **Regarding the Web:**
  - **100% of all public information is available over the Web**
  - **90% of high priority business transactions are available via the Web**
  - **The State's website:**
    - **Has a common look and feel**
    - **Offers alternative navigational paths**
    - **Incorporates an effective search engine**
    - **Utilizes a common authentication schema**
- ◆ **The State effectively attracts and retains qualified staff**
- ◆ **Customer satisfaction with IT service remains high**
- ◆ **The State's application portfolio, infrastructure, and staffing is:**
  - **Funded at a level that keeps it current**
  - **Optimized to deliver maximum efficiency and value**
- ◆ **Where appropriate, applications are shared at the enterprise level**
- ◆ **Effective governance processes are in place, resulting in IT decisions that:**
  - **Are well informed**
  - **Occur in a timely fashion**
  - **Are made with involvement at appropriate levels**
- ◆ **The State examines opportunities for partnership, both internally and externally**

The projects defined in this report position the State to realize this vision.

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**PROJECTS, COSTS AND TIMING**

The third phase of the planning effort focused on defining a specific set of projects, cost estimates, and timelines aimed at moving Alaska toward its defined IT goal state. The following table presents a summary description of each project, along with attendant key benefits.

ID	Project Name/Description	Benefits
A.	<b>Provide Dedicated Staffing to the TIC</b> – provides up to three permanent staff to support the IT governance duties of the TIC	<ul style="list-style-type: none"> <li>◆ Helps ensure that the State’s primary IT governance body is positioned to address complex IT initiatives on a timely basis</li> </ul>
B.	<b>Plan the Creation of an Office of the CIO</b> – plans for the creation of a cabinet-level office of the CIO (5 to 10 FTEs) to enhance and focus enterprise-level IT leadership; also charts GIS and e-Government coordinator positions to work within this office	<ul style="list-style-type: none"> <li>◆ Addresses the opportunity for improved State-wide IT leadership and coordination</li> <li>◆ Aligns Alaska with best practices</li> <li>◆ Establishes State-wide GIS standards, and facilitates coordination of efforts</li> <li>◆ Improves IT cost and labor efficiency</li> </ul>
C.	<b>Revise ITG Chargeback Model</b> – clarifies the chargeback model to improve communication and increase understanding of services offered; and provide direct linkages between ITG services and charges	<ul style="list-style-type: none"> <li>◆ Improves customer understanding and acceptance of ITG offerings; accommodates new ACS services</li> <li>◆ Promotes accountability</li> </ul>
D.	<b>Develop Department IT Strategic Plans</b> – documents and improves alignment of departmental IT priorities and IT investments with business objectives, working within the overall framework of (and providing input to) the State-wide IT plan	<ul style="list-style-type: none"> <li>◆ Ensures a consistent approach to documenting IT needs</li> <li>◆ Fosters more informed IT decision making</li> <li>◆ Improves efficiency and effectiveness of IT investments at departments, and State-wide</li> <li>◆ Aligns departmental IT investments with department business needs</li> </ul>
E.	<b>Develop State-wide IT Refresh Funding Approach</b> – initiates and funds a proactive State-wide refresh of technology infrastructure at predictable intervals, including desktop PCs, servers, and personal productivity software	<ul style="list-style-type: none"> <li>◆ Offers potential for economies of scale</li> <li>◆ Reduces support costs</li> <li>◆ Ensures up-to-date IT tools for users</li> <li>◆ Makes IT refresh a predictable business expense</li> </ul>

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<b>F.</b>	<b>Develop an Enterprise e-Government Approach</b> – implements the framework and infrastructure to facilitate Alaska’s defined goal state for the Web (including more services on the Web, increased availability of documents, greater efficiency in doing business with the State, and improved navigation and a common “look and feel” for the website across all departments)	<ul style="list-style-type: none"> <li>◆ Improves customer service and availability of key services</li> <li>◆ Establishes an enterprise architecture for e-Government at the State</li> <li>◆ Reduces costs associated with providing some services</li> <li>◆ Promotes a positive State image</li> <li>◆ Creates a “customer-centric” website that is easier to use and navigate</li> </ul>
<b>G.</b>	<b>Implement New State-wide IT Decision-Making Model</b> – puts into place the new decision-making process modeled by the steering committee during the planning process	<ul style="list-style-type: none"> <li>◆ Improves decision making around technology investments</li> <li>◆ Enhances communication and participation surrounding the IT decision-making process</li> <li>◆ Ensures IT investments are aligned with business needs</li> </ul>
<b>H.</b>	<b>Select New Financial Management/HR Software</b> – defines requirements and develops RFP, conducts evaluation, and selects a software solution for the State’s payroll, financial management, asset management, timekeeping, and human resources management functionality	<ul style="list-style-type: none"> <li>◆ Positions Alaska to invest in State-wide timekeeping, payroll, and human resources applications to address under-automated areas, and replace aging applications that lack functionality</li> <li>◆ Creates consensus on requirements</li> <li>◆ Clarifies understanding of costs</li> <li>◆ Improves ability to generate meaningful management information in a timely fashion</li> <li>◆ Improves productivity and efficiency in financial management efforts</li> </ul>
<b>I.</b>	<b>Plan Integrated Email and Calendaring Approach</b> – updates the State’s standard email and calendaring system to offer users an integrated, more functional package	<ul style="list-style-type: none"> <li>◆ Positions the State to improve email/calendaring functionality</li> <li>◆ Fosters enhanced communication statewide</li> </ul>
<b>J.</b>	<b>Develop State-wide IT Security Plan</b> – completes the effort initiated by the State and includes a review by a third-party IT security specialist	<ul style="list-style-type: none"> <li>◆ Protects the State’s valuable information technology assets</li> <li>◆ Addresses heightened concerns regarding homeland security</li> </ul>
<b>K.</b>	<b>Develop State-wide IT Disaster Recovery Plan</b> – prepares a plan for IT disaster recovery at the State-wide level, including responsible parties, costs, and overall approach	<ul style="list-style-type: none"> <li>◆ Prepares the State to rapidly redeploy information technology resources following a catastrophic event</li> <li>◆ Addresses heightened concerns regarding homeland security</li> </ul>
<b>L.</b>	<b>Conduct Mainframe Impact Analysis</b> – analyzes the long-term impact on the mainframe and its customers replacing the State’s core software, and makes associated recommendations; this effort also drafts a transition plan for staff impacted by this transition	<ul style="list-style-type: none"> <li>◆ Clarifies the options and ramifications of the various scenarios involving the State’s mainframe resources</li> <li>◆ Articulates an agreed-upon direction for the State’s core computing platform</li> </ul>

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<b>M.</b>	<b>Conduct IT Job Classification Study</b> – conducts a classification study to align job responsibilities with job descriptions and review IT compensation strategies at the State, including defining major issues, developing new job classifications (if needed), and reclassification of staff (if needed); also includes a staff transition plan to implement the study’s recommendations	<ul style="list-style-type: none"> <li>◆ Ensures staff are appropriately classed and compensated</li> <li>◆ Improves IT recruiting process</li> <li>◆ Creates and documents a proactive approach to changes in the IT staff environment at the State</li> </ul>
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The table below summarizes one-time cost estimates for each project.

### One-Time Cost Estimates

<b>Projects</b>		<b>One-Time Costs</b>	
		<b>Lower</b>	<b>Upper</b>
<b>A</b>	Provide Dedicated Staffing to the TIC	\$ -	\$ -
<b>B</b>	Plan the Creation of an Office of the CIO	\$ -	\$ 100
<b>C</b>	Revise ITG Chargeback Model	\$ -	\$ 90
<b>D</b>	Develop Department IT Strategic Plans	\$ 500	\$ 2,700
<b>E</b>	Develop State-wide IT Refresh Funding Approach	\$ -	\$ 60
<b>F</b>	Develop an Enterprise e-Government Approach	\$ 38	\$ 500
<b>G</b>	Implement New State-wide IT Decision-Making Model	\$ -	\$ 36
<b>H</b>	Select New Financial Management/HR Software	\$ 300	\$ 750
<b>I</b>	Plan Integrated Email and Calendaring Approach	\$ -	\$ 100
<b>J</b>	Develop State-wide IT Security Plan	\$ 12	\$ 51
<b>K</b>	Develop State-wide IT Disaster Recovery Plan	\$ 120	\$ 240
<b>L</b>	Conduct Mainframe Impact Analysis	\$ 161	\$ 266
<b>M</b>	Conduct IT Job Classification Study	\$ 161	\$ 281
<b>Total - All Projects</b>		<b>\$ 1,292</b>	<b>\$ 5,175</b>

Note: Costs are in thousands

Please note the following:

- ◆ Project H – Select New Financial Management/HR Software does not include software purchase or implementation costs — a significant expenditure
- ◆ Cost estimates include funding that may already be budgeted
- ◆ Appendix A provides more detailed descriptions and cost assumptions for each project

A Gantt chart depicting recommended project timelines follows.

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## Recommended Project Schedule

Task Name	Start	Finish	2003					2004				2005	
			Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2
<b>Projects</b>	<b>Fri 11/1/02</b>	<b>Fri 4/10/05</b>											
A. Provide Dedicated Staffing to the TIC	Fri 11/1/02	Fri 1/3/03											
B. Plan the Creation of an Office of the CIO	Wed 1/1/03	Wed 12/31/03											
C. Revise ITG Chargeback Model	Fri 11/1/02	Fri 10/31/03											
D. Develop Department Strategic IT Plans	Fri 11/1/02	Mon 5/3/04											
E. Develop Statewide Technology Refresh Funding Approach	Wed 10/1/03	Thu 4/10/04											
F. Develop an Enterprise E-Government Approach	Wed 1/1/03	Fri 12/31/04											
G. Implement New Statewide IT Decision-Making Model	Tue 7/1/03	Mon 12/29/03											
H. Select New Financial Management/HR Software	Fri 11/1/02	Tue 11/2/04											
I. Plan Integrated Email and Calendaring Approach	Wed 1/1/03	Tue 7/1/03											
J. Develop Statewide IT Security Plan	Fri 11/1/02	Fri 8/1/03											
K. Develop Statewide IT Disaster Recovery Plan	Wed 10/1/03	Thu 9/30/04											
L. Conduct Mainframe Impact Analysis	Tue 4/1/03	Thu 3/31/05											
M. Conduct IT Job Classification Study	Thu 4/1/04	Fri 4/1/05											

**Note: The majority of these projects lay the strategic groundwork for additional IT effort and investment. To provide the State a more comprehensive picture of downstream investment requirements, the table on the following page highlights the major long-term cost estimates associated with implementing these initial, foundation-building projects.**



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The table below articulates the major *long-term cost* estimates and labor impacts associated with implementing the projects in this plan. For example, Project I – Plan Integrated Email and Calendaring Approach, actually represents a two-phase effort. The first phase focuses on developing an agreed-upon path for improving integration across the State’s email and calendaring systems. One-time costs presented on page 1-8 provide an estimate for that effort. The following table presents estimates for *implementing* that approach (e.g., one-time costs of \$1,876,000 to \$8,737,000 and annual software maintenance costs of \$181,000 – along with associated one-time and annual labor estimates). The reader should bear in mind that these are preliminary estimates, provided purely for planning purposes, and will require revision as implementation of the plan progresses.

## Estimated Long-Term Project Costs and Labor Impacts

Projects	Implementation Costs		Annual Costs	Duration	Implementation Staff Hours	Recurring Staff Hours
	Lower	Upper				
<b>A</b> Ongoing Operation of the TIC*	\$ -	\$ -	\$ 195	duration	0	6,000
<b>B</b> Ongoing Operation of the Office of the CIO	\$ -	\$ 46	\$ 1,500	ongoing	0	12,600
<b>C</b> Revise ITG Chargeback Model	\$ -	\$ -	\$ -	none	0	0
<b>D</b> Ongoing Development of Department IT Strategic Plans**	\$ -	\$ -	TBD	5 years	TBD	TBD
<b>E</b> Implement State-wide IT Refresh Funding***	\$ -	\$ 20,000	\$ 10,000	ongoing	150	35,000
<b>F</b> Implement an Enterprise E-Government Approach	\$ 2,300	\$ 4,500	\$ 250	2 years	100,000	15,000
<b>G</b> Implement New State-wide IT Decision-Making Model	\$ -	\$ -	\$ -	none	0	0
<b>H</b> Implement New Financial Management/HR Software	\$ 40,000	\$ 90,000	\$ 10,000	3 years	300,000	40,000
<b>I</b> Implement Integrated Email and Calendaring Approach	\$ 1,876	\$ 8,737	\$ 181	ongoing	12,387	TBD
<b>J</b> Implement State-wide IT Security Plan	\$ 110	\$ 225	\$ 90	ongoing	500	500
<b>K</b> Implement State-wide IT Disaster Recovery Plan	\$ 325	\$ 500	\$ 500	ongoing	520	0
<b>L</b> Implement Mainframe Impact Analysis Recommendations	\$ 30,000	\$ 40,000	\$ 3,000	5 years	156,000	TBD
<b>M</b> Implement IT Job Classification Study Recommendations	\$ -	\$ 2,144	\$ 2,144	none	0	0
<b>Total - All Projects</b>	<b>\$ 74,611</b>	<b>\$ 166,153</b>	<b>\$ 27,666</b>		<b>569,557</b>	<b>103,100</b>

Note: Costs (not hours) are in thousands

\*In the event positions to support the TIC cannot be found internally, this table presents incremental annual costs

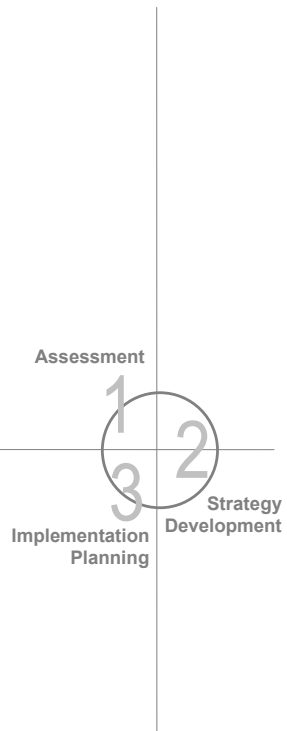
\*\*Dependent on specific department needs

\*\*\*May require significant upfront investment to fund departments that have not recently made these upgrades



**STATEWIDE  
INFORMATION  
TECHNOLOGY  
PLAN**

Chapter 1:  
Executive  
Summary



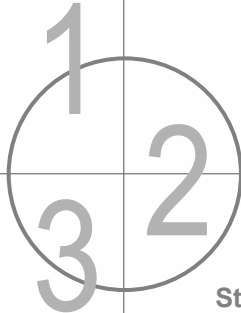
## CONCLUSION

Though comprehensive, this planning effort represents the “easy part” – the *real* work lies ahead: translating recommendations into *results*. Implementing the State-wide Information Technology Plan as outlined in this document is crucial to realizing the following benefits for the State of Alaska:

- ◆ **Strengthened IT leadership and coordination, across the State and within the departments**
- ◆ **Economies of scale and reduced support costs for State desktops**
- ◆ **A solid foundation for future e-Government initiatives**
- ◆ **Improved IT decision making that aligns department and State IT investments with key business priorities**
- ◆ **Upgraded software applications that improve staff efficiency and service to the State’s customers**
- ◆ **A more secure and recoverable technical infrastructure**
- ◆ **A proactive approach to IT staffing**

## CHAPTER 2

Assessment



Strategy  
Development

Implementation  
Planning

**assessment  
results**

# Overview

## ASSESSMENT 2

**This chapter contains our assessment of Alaska’s IT service delivery, IT decision making, software applications, and technical infrastructure. It presents findings regarding:**

- ♦ Strategic IT Issues
- ♦ Strengths
- ♦ IT Service Delivery
- ♦ IT Decision Making
- ♦ Applications
- ♦ Technical Infrastructure
- ♦ Customer Satisfaction Survey

**Note: This assessment represents a point in time — it reflects a “snapshot” of the state of IT during the period in which the analysis occurred.**

# Strategic IT Issues

## ASSESSMENT 2

**Strategic IT issues identify the most important challenges that must be addressed by this plan. Pacific Technologies derived the following strategic issues from the results of the assessment:**

**❶ What are appropriate IT service delivery roles for:**

- ITG?
- Departments and divisions?
- ACS?

With the advent of the ACS telecommunications partnership, the role of ITG is changing – additionally, communication and role clarity across the IT service delivery spectrum need improvement.

**❷ What major State-wide applications need investment?**

The State relies on aging applications to provide core enterprise functionality – and other key areas (e.g., human resources) remain under-automated.

**❸ How can IT leadership and decision making better support future IT needs?**

Although key governance structures are in place, the State could benefit from a more unified IT vision, and lacks dedicated staff resources to champion enterprise technology efforts

# Strategic IT Issues

## ASSESSMENT

# 2

### ④ What opportunities exist, if any, for realizing IT economies of scale?

In an organization as large as the State, decentralization makes sense for technology support of many department-specific functions. Nonetheless, the assessment surfaced several opportunities for improving IT labor and funding efficiency.

### ⑤ How can the State most effectively utilize, classify, and develop IT staff in a challenging labor environment?

While Alaska has traditionally faced difficulties in recruiting qualified technical resources, staff with key IT skills are retiring from the State's labor force, and many IT staff are working outside their job classifications.

### ⑥ What can the State do to improve its approach to IT funding?

Many agencies are still utilizing outdated technology – and replacement of essential tools (e.g., workstations, servers, and software) is addressed in a reactive mode, rather than proactively planned. The ITG chargeback model, although rational in design, is not generally well-understood, and discourages some agencies from utilizing ITG for other services.

### ⑦ How, and to what degree, should departmental IT initiatives align with the overall State-wide plan?

The State lacks a formal process for coordinating strategic IT investments across the enterprise. Correspondingly, opportunities for sharing “lessons learned,” coordinating investments, and converging on standards are lost.

# [ Strengths ]

## ASSESSMENT 2

**Projects of this nature often tend to focus exclusively on areas of concern. Through the course of our assessment, we identified a variety of IT strengths worth noting — and building upon. These include:**

- ◆ **On the whole, State staff reported that IT personnel are skilled and capable**
- ◆ **In the aggregate, IT staffing levels appear to be appropriate**
- ◆ **The State has taken a significant and innovative step in engineering the ACS telecommunications partnership**
- ◆ **The State took the initiative to establish an IT decision-making committee that involved the highest levels of government**
- ◆ **WAN and LAN infrastructures are reliable and well-supported**
- ◆ **ITG maintains a technically sound and reliable data center**

# [ IT Service Delivery: ]

## Overview

## ASSESSMENT 2

***IT service delivery* refers to the IT organizational structure and staffing approach to supporting applications and infrastructure. This section summarizes our assessment of IT service delivery as follows:**

- ◆ Findings
- ◆ Current Staffing Levels
- ◆ Impacts

***Refer to Appendix B for more detailed IT service delivery analysis.***

# IT Service Delivery: Findings

## ASSESSMENT 2

This section summarizes Pacific Technologies' IT service delivery findings:

- ◆ **On a State-wide basis, staffing levels are reasonable:**
  - PC workstation-to-support-staff ratio is 133:1 – we generally see ratios of 100:1 to 150:1 in well-supported public sector organizations
  - IT FTEs as a percentage of total FTEs is 3.6% – we generally see 3% to 5% in well-supported public sector organizations
- ◆ **Overall, IT staff are perceived to be skilled and capable**
- ◆ **The State has difficulty attracting and retaining qualified IT staff**
- ◆ **Several concerns surround IT job classifications:**
  - Many staff perform duties outside their job descriptions
  - Reclassification is difficult
  - New classification, when possible, is too time-consuming
  - Perception that many classifications are under-compensated
- ◆ **For the most part, staff allocations are appropriate – but there are “too many cooks”<sup>1</sup> in the following areas:**
  - Security
  - Disaster recovery planning
  - Standards and policy development



# IT Service Delivery: Findings (cont.)

## ASSESSMENT

# 2

- ◆ **Some departments rely heavily on “shadow staff”<sup>2</sup> – in the following list, numbers in parentheses represent the percentage of total IT effort provided by shadow staff:**
  - Department of Administration (32%)
  - Department of Health and Social Services (16%)
  - Department of Public Safety (22%)
  - Department of Labor and Workforce Development (24%)
  - Department of Environmental Conservation (27%)
- ◆ **Critical legacy skill sets are leaving the State’s workforce as IT staff retire – especially older programming languages**
- ◆ **Insufficient opportunities exist for both technical and business application training**
- ◆ **Future role of ITG is unclear – particularly in light of the ACS contract**
- ◆ **Significant service delivery details in the ACS contract remain unaddressed:**
  - Help desk
  - Staff transfer
- ◆ **Remote sites suffer from insufficient IT service support**
- ◆ **Approach to security is uncoordinated**
- ◆ **Overall, there is poor communication around IT:**
  - ITG with the departments
  - Within departments and divisions
  - Between departments

# [ IT Service Delivery: Findings (cont.) ]

## ASSESSMENT 2

- ◆ PTI, with the assistance of the State, conducted a quantitative analysis of IT staffing levels
- ◆ The data were analyzed on a departmental basis and in the aggregate
- ◆ Findings specific to the departments appear in Appendix B
- ◆ The table on the following page presents the aggregate level of full time equivalents (FTE) supporting various categories of IT labor at the State

# IT Service Delivery: Current IT O&M Staffing Levels

## ASSESSMENT 2

- ◆ In developing the findings documented on the previous pages, we evaluated IT staffing levels across five functional areas:
  - Customer Services — functions related to the support of the desktop environment
  - System Services — functions related to managing and maintaining hardware and network resources
  - Business Application Services — functions related to developing and maintaining software in support of State business needs
  - IT Planning — functions related to the development of long-term IT vision
  - IT Administration — functions related to the management of IT
- ◆ **Note: The table does not include IT labor devoted to capital projects — it reflects only ongoing operations and maintenance labor**
- ◆ **Appendix B contains definitions of the service areas and associated functions referenced in the table**

State of Alaska  
Statewide Information Technology Plan  
October 31, 2002

Alaska State-wide Summary O&M IT Staffing						
IT Function	ITG	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks" <sup>1</sup>
<b>Customer Services</b>	8.75	120.98	1.40	9.64	140.77	
Help Desk (Tier 1)	8.75	33.85	0.26	3.06	45.92	230
Desktop PC support (Tier 2)	0.00	46.88	0.47	2.22	49.56	218
Business application support	0.00	25.01	0.25	2.07	27.32	190
Training	0.00	15.25	0.43	2.30	17.98	193
<b>System Services</b>	72.00	75.60	2.75	10.95	161.30	
Network connectivity (WAN/LAN)	29.25	15.10	0.20	3.76	48.31	193
Server administration	13.25	22.32	0.23	1.41	37.21	182
Data center operations	12.75	5.43	0.06	0.31	18.54	51
Database administration	4.75	18.25	1.96	4.38	29.34	134
Security administration	1.00	9.19	0.26	0.60	11.04	135
Telephone systems support	10.00	1.80	-	0.49	12.29	29
Mobile computing support	1.00	3.51	0.05	-	4.56	70
<b>Business Application Services</b>	6.50	193.71	12.25	26.41	238.87	
Application development	2.00	63.75	9.06	8.58	83.38	200
Small application support	0.50	23.11	0.23	1.98	25.81	185
Internet/intranet support	1.00	20.80	0.25	7.33	29.38	168
Requirements analysis	0.75	25.86	1.57	3.57	31.74	175
Custom application maintenance	1.00	47.39	1.10	4.14	53.63	182
Package application maintenance	1.25	12.81	0.05	0.82	14.93	129
<b>IT Planning</b>	1.05	29.97	0.56	4.19	35.77	
Strategic planning	0.50	9.60	0.03	1.59	11.72	143
Research and development	0.00	12.51	0.42	1.34	14.27	152
Disaster recovery planning	0.20	5.19	0.11	0.12	5.62	96
Governance coordination	0.35	2.67	-	1.14	4.16	53
<b>IT Administration</b>	22.70	46.03	2.00	22.16	92.89	
Asset management	0.00	5.56	0.05	0.85	6.46	96
IT procurement	3.00	7.19	0.05	1.87	12.10	137
Project management	2.75	16.21	1.90	10.13	30.99	143
Standards and policies development	1.00	5.25	-	4.40	10.64	102
Administrative support	11.75	5.34	-	2.23	19.31	100
Departmental management	4.20	6.50	-	2.70	9.20	62
<b>FTE TOTAL</b>	111.00	466.31	18.96	73.34	669.60	
<b>FTE as % of TTL IT FTE</b>	17%	70%	3%	11%		

<sup>1</sup> "Cooks" refers to the number of discrete individuals performing an IT activity

# IT Service Delivery: Impacts

## ASSESSMENT

## 2

The preceding IT service delivery findings lead to a variety of impacts:

- ◆ **Compensation and classification issues may exacerbate the difficulty in attracting and retaining IT staff**
- ◆ **The retirement of IT staff who maintain legacy applications and the inability to replace their skills, creates uncertainty around the future of applications housed on the mainframe (e.g., AKPAY, AKSAS, etc.)**
- ◆ **“Too many cooks” in security, disaster recovery planning, and standards and policy development dilutes the State’s ability to efficiently and effectively perform these critical activities**
- ◆ **Heavy reliance on shadow staff can result in fractured service delivery, unmet needs, and support staff who are inadequately trained to perform these tasks**
- ◆ **Lack of a coordinated approach to security leaves the State and its agencies vulnerable to intrusion and other malicious activities**
- ◆ **Poor communication results in frustrated IT staff and end users, poor coordination of services and new initiatives, and lost opportunities for efficiencies and economies of scale**

# [ IT Decision Making: ]

## Overview

## ASSESSMENT 2

***IT decision making* refers to the processes and participants responsible for making IT investment decisions.**

**This section presents our assessment of these processes as follows:**

- ◆ Findings
- ◆ As-Is Decision-Making Process
- ◆ IT Operation Budget Summary
- ◆ Impacts

# [ IT Decision Making: Findings ]

## ASSESSMENT 2

**This section summarizes Pacific Technologies' IT decision-making findings:**

- ◆ **State-wide IT governance bodies exist:**
  - Technology Information Council (TIC)
  - Technology Advisory Council (TAC)
  - Administrative Solutions Team (AST)
  - Page 2-14 presents information on the composition and responsibilities of these bodies
- ◆ **Specialty subcommittees are also in place (e.g., WAN User Group, etc.)**
- ◆ **Agencies, departments, and divisions have autonomy to make their own IT decisions**
- ◆ **There is no consistent approach to documenting the IT direction for individual departments or aligning their IT strategies with overall business objectives (i.e., not all departments have developed strategic IT plans)**
- ◆ **Decision making tends to focus on cost instead of enterprise value**
- ◆ **On average, IT decision making received the lowest scores on the customer satisfaction survey**
- ◆ **No enterprise-wide tracking of IT spending occurs**
- ◆ **No process is in place to examine potential economies of scale (e.g., enterprise licensing)**

# IT Decision Making: Findings (cont.)

## ASSESSMENT 2

### ◆ Several issues surround the TIC:

- Responsibility for State-wide IT leadership falls to the TIC; while this approach has merit, it provides IT policy direction at a very high level and it will not adequately address increasing IT needs across the State in the days ahead
- Insufficient staffing impedes the body's ability to work in an effective and timely manner
- TAC has the potential to be utilized more widely

### ◆ There is no individual, full-time, point of accountability or coordination for IT at the State (e.g., a CIO); this is at odds with best practices:

- Forty of the fifty states have a CIO
- The federal government has mandated that all executive departments and agencies create CIO positions

### ◆ Customers perceive the ITG chargeback model as:

- Difficult to understand
- Too expensive
- Not directly tied to services received

### ◆ No enterprise-wide technology refresh policy or funding exists — the State lacks a consistent way to keep PCs and major infrastructure components current across the enterprise

*The following page presents the current makeup and roles of the TIC, TAC, and AST*

# IT Decision Making: Findings (cont.)

## ASSESSMENT 2

### TIC

- ◆ Composed of the governor, the commissioner from each principal department of the executive branch, the president of the University of Alaska, the executive director of the Legislative Affairs Agency, a member of the public appointed by the governor, and one legislator from each house
- ◆ Responsible for developing policy for voice, video and data systems within state government
- ◆ By statute the TIC is to meet at least four times annually
- ◆ Created within the office of the governor
- ◆ Currently chaired by the Lt. Governor

### TAC

- ◆ Made up of upper-level IT professionals from the agencies
- ◆ TAC is an advisory body, and serves at pleasure of the TIC
- ◆ The TAC agenda is largely defined by the TIC Policy Committee; TAC occasionally suggests agenda items for TIC consideration

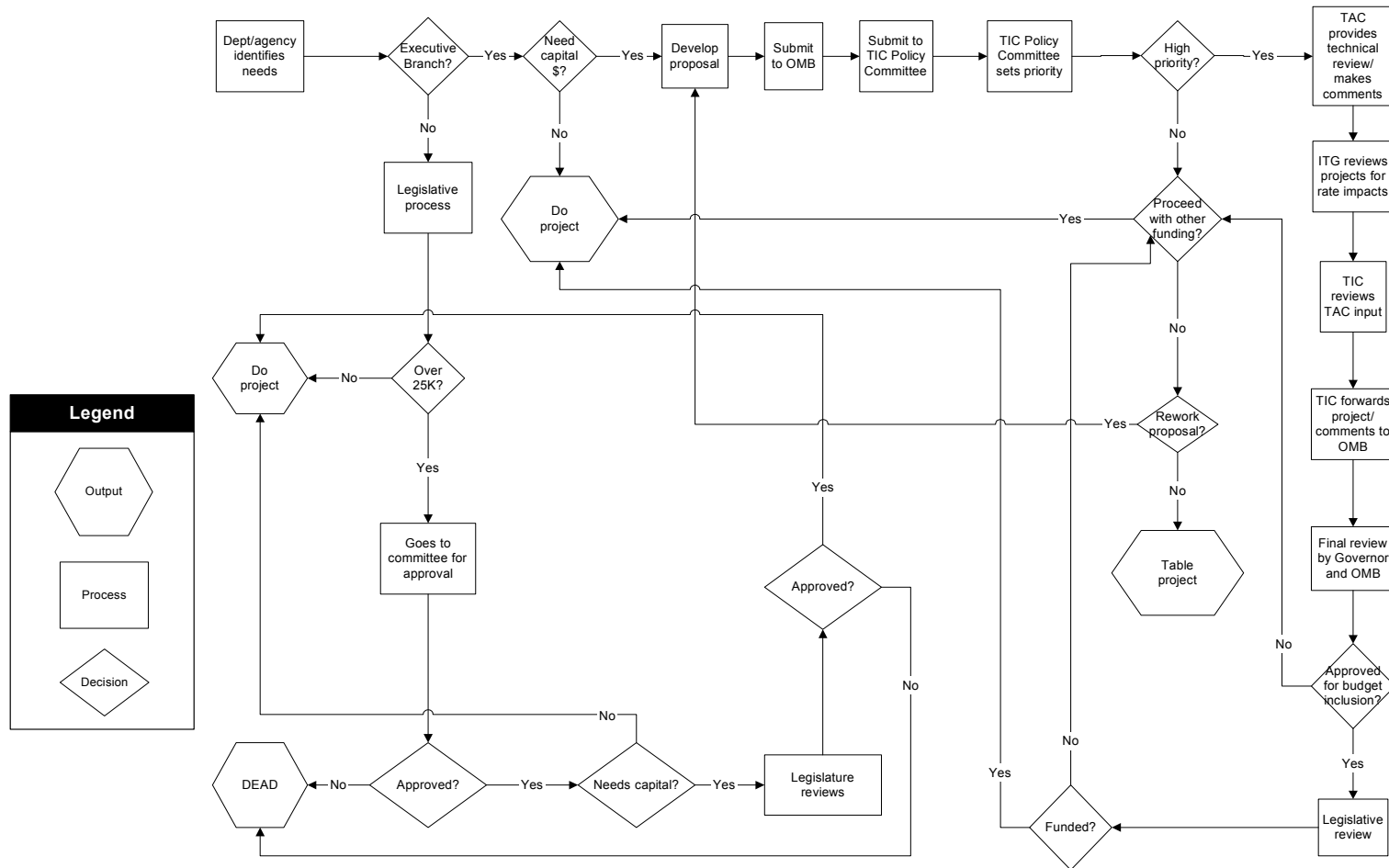
### AST

- ◆ Made up of Administrative Services Directors
- ◆ Makes recommendations to the TIC as requested



# IT Decision Making: As-Is Decision-Making Process

The diagram below presents the State's current IT decision-making process, modeled by the project Steering Committee during a workshop facilitated by Pacific Technologies.



State of Alaska  
Statewide Information Technology Plan  
June 10, 2002

# IT Decision Making:

## Current Roles & Responsibilities

### ASSESSMENT

2

The following pages present roles and responsibilities associated with the current IT decision-making model:

#### DEPARTMENT/AGENCY

- ◆ Identifies need
- ◆ Documents and justifies
- ◆ Sets agency priorities
- ◆ Advocates for projects
- ◆ Responsible for implementation
- ◆ Finds money

#### ITG

- ◆ Provides technical support to TIC and TAC
- ◆ Assesses rate impacts

#### OMB

- ◆ Catalogs projects
- ◆ Reviews operating budget costs
- ◆ Advocates for projects
- ◆ Recommends funding limits
- ◆ Looks for commonalities across projects
- ◆ Makes specific project recommendations to Governor
- ◆ Assists with finding money

#### LEGISLATURE

- ◆ Approves funding

#### TIC POLICY

- ◆ Takes an enterprise look
- ◆ Sets project priorities on statewide basis
- ◆ Makes recommendations to OMB
- ◆ Looks for commonalities across projects

#### TAC

- ◆ Provides technical review and advice
- ◆ Looks for technology synergies/solutions

#### GOVERNOR

- ◆ Requests budget
- ◆ Provides final project approval for Executive branch

# [ IT Decision Making: ]

## IT Operating Budget Summary

## ASSESSMENT 2

- ◆ The table to the right presents a summary of State-wide IT operating spending for FY 2001
- ◆ This summary combines data generated by the AKSAS Geneva report and departmental labor costs from Pacific Technologies' staffing analysis
- ◆ The summary shown here should not be interpreted to be an exhaustive accounting of all IT spending in the State for FY 2001, as inconsistencies in coding IT expenses exist between departments

2001 FY Expenses		
Dept.chargeback payments to fund ITG	\$	13,182
Contractual	\$	7,981
Supplies	\$	4,979
Equipment	\$	9,583
Departmental labor cost	\$	37,954
<b>Total IT Expenditures</b>	<b>\$</b>	<b>73,679</b>

Numbers in thousands

- ◆ Developing a comprehensive total cost for IT at the State is difficult to accomplish at this time
- ◆ Appendix H provides additional detail regarding the source and appropriate interpretation of the data shown

# IT Decision Making: IT Operating Budget Summary

## ASSESSMENT 2

Pacific Technologies analyzed IT operating spending across several areas. This table below presents a summary of the ITG expenditure breakdown for FY 2002 and FY 2003:

### Information Technology Group (ITG)

ITG Expenditure Breakdown FY 2002 & FY 2003		
	FY 2002	FY 2003
<b>Staff</b>		
ITG Personnel Costs	\$ 4,606	\$ 4,865
<b>Goods &amp; Materials</b>		
Travel	\$ 64	\$ 107
Contractual	\$ 4,456	\$ 4,640
Supplies	\$ 289	\$ 243
Equipment	\$ 148	\$ 45
<b>Total:</b>	\$ 9,563	\$ 9,900

- ◆ ITG totals presented in the table to the right do not include depreciation or telecommunication-related expenses

Numbers in thousands

# IT Decision Making: Impacts

## ASSESSMENT 2

**The preceding IT decision-making findings lead to a variety of impacts:**

- ◆ In the face of increasing IT needs, insufficient staffing in support of IT leadership could exacerbate coordination and enterprise governance issues
- ◆ In the absence of a State-wide technology refresh approach, potential benefits from economies of scale (including reduced support costs due to a more homogenous infrastructure) are lost
- ◆ High levels of departmental autonomy, coupled with unclear definition of roles, leads to a sub-optimal balance of centralized and decentralized IT service delivery
- ◆ Focus on cost instead of value can result in decisions that are “penny-wise and pound-foolish”
- ◆ Unclear chargeback model discourages agencies from utilizing ITG services
- ◆ The State cannot truly assess its total IT costs

# Applications: Overview

## ASSESSMENT 2

***Applications* refer to the software used to support core business functions.**

**This section presents our assessment results regarding the State's primary software applications as follows:**

- ◆ Findings
- ◆ Impacts

# Applications: Findings

## ASSESSMENT 2

**This section summarizes Pacific Technologies' application-related findings:**

- ◆ **Of the four IT dimensions analyzed (applications, service delivery, technical infrastructure, and decision making), applications received the highest scores (on average) on the customer satisfaction survey**
- ◆ **AKPAY, AKSAS, and ABS, while stable and reliable, are:**
  - Poorly integrated
  - Aging (with the exception of ABS)
  - Functionally lacking
  - Difficult to maintain
  - Based on outdated technology
- ◆ **Inconsistent email and calendaring software is in use across the State — the current State standard lacks integration between these two functions**
  - Agencies currently utilizing integrated email and calendaring packages are more sophisticated users of calendar automation
- ◆ **No overall coordinated approach exists regarding:**
  - Enterprise licensing
  - Web (e.g., consistent look/feel, e-signature, e-Government, “branding,” user interface, content management)
  - GIS (e.g., incompatible technical approaches, no State-wide GIS standards, outdated and incomplete information)
  - Document management/imaging
- ◆ **While Workplace Alaska works well from the customer perspective, it has considerable deficiencies, including:**
  - Lack of functionality such as automatic EEO report generation
  - Utilization of technology which is difficult for the State to support (Lotus Notes)

# Applications: Impacts

## ASSESSMENT 2

The preceding application findings lead to a variety of impacts:

- ◆ The financial management system will likely need to be replaced due to its age and the increasing difficulty in finding IT staff with the requisite skills to maintain it
- ◆ Staff cannot get necessary reports from the payroll system and it is in need of updating to bring the State back into compliance with its vendor agreement
- ◆ Users of the State-provided email and calendaring system miss opportunities for efficiencies that an integrated system would provide
- ◆ Lack of a State-wide approach to enterprise licensing leads to lost opportunities for economies of scale
- ◆ An uncoordinated approach to GIS on an enterprise-wide basis has resulted in duplication of efforts across the State and a limited ability to share data
- ◆ The lack of consistent branding and navigation elements on the State's website can confuse visitors and discourage use



# Technical Infrastructure: Overview

## ASSESSMENT 2

***Technical Infrastructure* refers to the hardware, networks, databases, and operating systems that support the applications.**

**This section presents Pacific Technologies' assessment results regarding the State's technical infrastructure, as follows:**

- ◆ Findings
- ◆ Current Architecture
- ◆ Impacts

# Technical Infrastructure: Findings

## ASSESSMENT 2

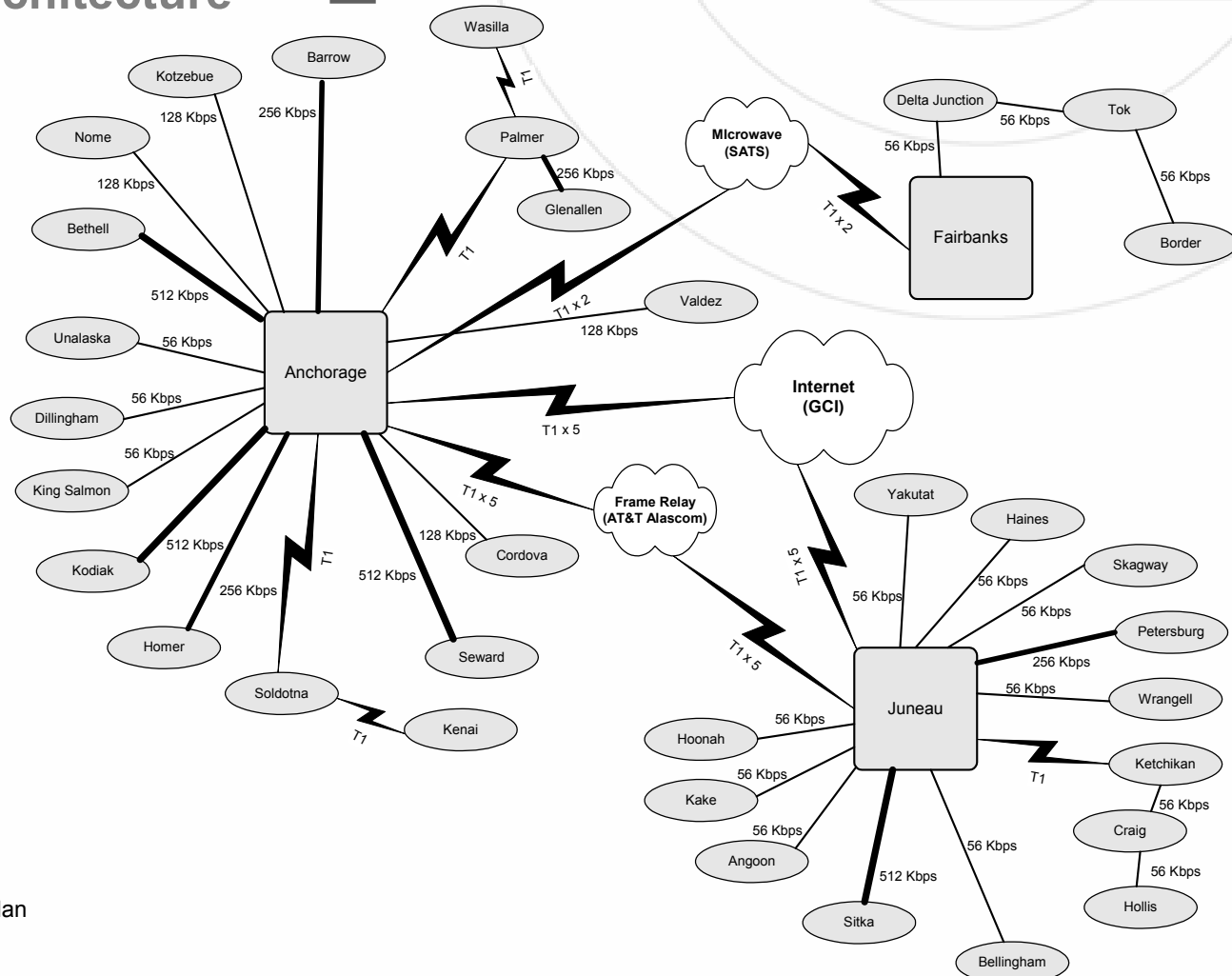
**This section summarizes Pacific Technologies' technical infrastructure findings:**

- ◆ **The WAN/LAN infrastructure is reliable**
- ◆ **The State has recently made a significant investment in core technologies (e.g., mainframe, rack hardware, central backup, etc.)**
- ◆ **ITG maintains a technically sound and reliable data center**
- ◆ **Enterprise standards for personal productivity tools (i.e., MS Office) are in place**
- ◆ **Given Alaska's unique challenges, the State has done a reasonable job providing connectivity to users, but many remote sites have low bandwidth**
- ◆ **While the ACS contract has the potential to significantly improve telecommunications across the State, major technical infrastructure details in the ACS contract remain unresolved**
- ◆ **The State has a very heterogeneous technology environment, including:**
  - Over 20 disparate database systems (e.g., MS SQL, Oracle, Informix, Dbase IV, etc.)
  - Many desktop operating systems (e.g., Linux, DOS, Windows 3.11, Windows 95, Windows 98, Windows ME, Windows NT, Windows 2000, Windows XP, Solaris, MacOS, etc.)
- ◆ **Some aging technologies are still in place (e.g., Wang, ADABAS, etc.)**
- ◆ **No clear direction for the future of the mainframe has been charted**
- ◆ **No State-wide security plan is in place**

# Technical Infrastructure: Current Architecture

## ASSESSMENT 2

- ◆ The diagram to the right presents Alaska's current WAN configuration
- ◆ A depiction of the State's core architecture appears on the following page



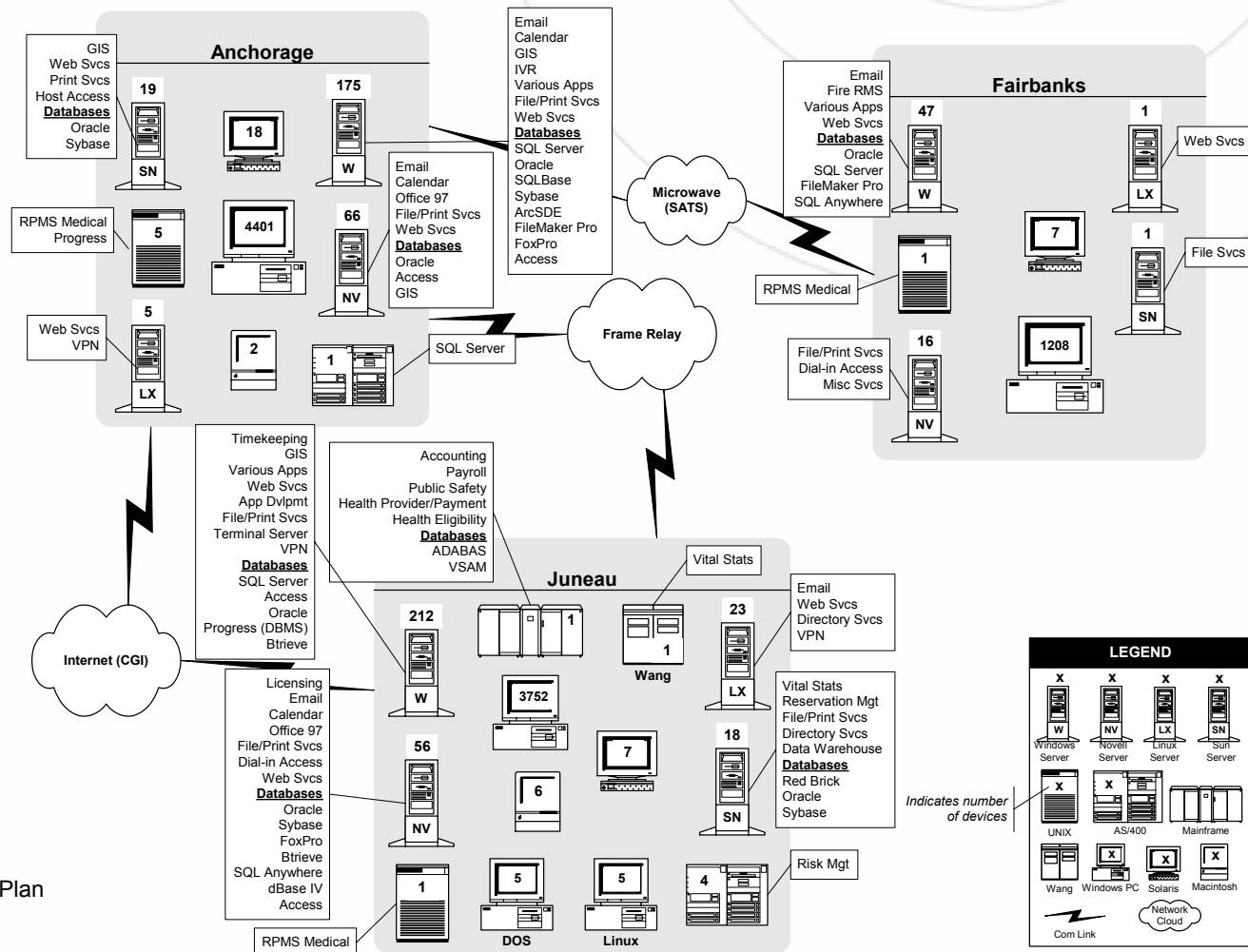
State of Alaska  
Statewide Information Technology Plan  
October 31, 2002

# Technical Infrastructure:

## Current Architecture, cont.

## ASSESSMENT 2

- ◆ The diagram to the right presents Alaska's core architecture
- ◆ Total PCs: 13,000
- ◆ Total servers: 844
- ◆ Refer to Appendix G for more detail regarding the State's IT inventory



State of Alaska  
Statewide Information Technology Plan  
October 31, 2002

# Technical Infrastructure: Impacts

## ASSESSMENT 2

The preceding technical infrastructure findings lead to a variety of impacts:

- ◆ Recent equipment purchases and upgrades position ITG to provide hosting and backup services to other agencies
- ◆ The heterogeneous environment raises support costs due to the greater number of skills that must be retained on staff
- ◆ It is uncertain whether the State will be able to support its mainframe-based applications as they continue to age and skills retire from the State
- ◆ Lack of a security plan opens the State to a risk of malicious behaviors (e.g., intrusion, data destruction, etc.) and inadequate ability to respond to associated events

# [Customer Satisfaction Survey: Overview]

## ASSESSMENT 2

- ◆ As part of the assessment, PTI conducted a State-wide survey of employees regarding their satisfaction with IT decision making, applications, service delivery, and technical infrastructure
- ◆ Managers, staff and temporary employees completed a total of 3,823 surveys
- ◆ The survey asked State staff to rank their level of agreement with 37 positively-worded statements on a scale of 1 (never agree) through 7 (always agree)
- ◆ The following page summarizes the survey findings
- ◆ Appendix C contains detailed survey results

# Customer Satisfaction Survey: Summary Findings

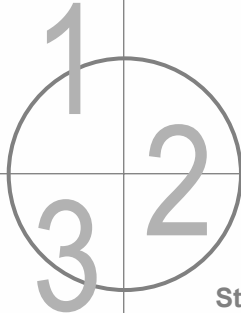
## ASSESSMENT 2

- ◆ Overall satisfaction with applications is higher than any other category (average = 5.18)
- ◆ Overall, users express high levels of satisfaction with the following applications:
  - Personal productivity applications
  - AKPAY
  - Email/scheduling
  - The State's website
  - Workplace Alaska
- ◆ IT staff are perceived to be skilled and capable
- ◆ Respondents appear least satisfied with IT decision-making processes
- ◆ Respondents also express low levels of satisfaction with:
  - ITG chargeback model
  - Remote access computing
- ◆ Respondents expressed high levels of satisfaction with PC support and responsiveness of departmental/divisional IT staff
- ◆ On average, highest satisfaction levels were reported by Legislature staff; lowest levels of satisfaction were reported by Corrections staff

**Appendix C presents detailed survey results along with the survey questions.**

## CHAPTER 3

Assessment



Strategy  
Development

Implementation  
Planning

**strategic  
direction**

State of Alaska  
Statewide Information Technology Plan  
October 31, 2002



# Overview

## STRATEGIC DIRECTION

# 3

**The preceding findings and issues led to the strategic recommendations detailed in this chapter. It presents:**

- ◆ IT Goal State
- ◆ Linkage of Strategic Issues and Recommendations
- ◆ Strategic Recommendations Overview
- ◆ Recommendations: IT Service Delivery
- ◆ Recommendations: IT Decision Making
- ◆ Recommendations: Applications
- ◆ Recommendations: Technical Architecture
- ◆ Recommendations: Ideal Application Architecture
- ◆ Recommendations: Prioritization Results

# [ IT Goal State ]

## STRATEGIC DIRECTION

3

**The *IT Goal State* represents a future vision for using IT across the State of Alaska. The project steering committee developed the IT Goal State presented below (and continued on the following page):**

◆ **Regarding the Web:**

- 100% of all public information is available over the Web
- 90% of high priority business transactions are available via the Web
- The State's website:
  - Has a common look and feel
  - Offers alternative navigation paths
  - Incorporates an effective search engine
  - Utilizes a common authentication schema

◆ **The State effectively attracts and retains qualified IT staff**

◆ **Customer satisfaction with IT service remains high**

## IT Goal State (cont.)

### STRATEGIC DIRECTION

3

- ◆ **The State's applications, infrastructure, and staffing is:**
  - Funded at a level that keeps them current
  - Optimized to deliver maximum efficiency and value
- ◆ **Where appropriate, applications are shared at the enterprise level**
- ◆ **Effective governance processes are in place, resulting in IT decisions that:**
  - Are well informed
  - Occur in a timely fashion
  - Are made with involvement at appropriate levels
- ◆ **The State examines opportunities for partnership, both internally and externally**

***The State-wide information technology plan should help the State achieve this goal state within three-to-five years***

# [ Linkage of Strategic Issues and Recommendations ]

## STRATEGIC DIRECTION

3

This table highlights the plan's major recommendations, and their linkages to the strategic IT issues presented in the Executive Summary. Note that some key recommendations transcend more than one strategic issue. Additional recommendations are presented throughout the remainder of this chapter.

STRATEGIC IT ISSUES	KEY RECOMMENDATIONS
<b>❶ What are appropriate IT service delivery roles for:</b> <ul style="list-style-type: none"> <li>• ITG?</li> <li>• Departments and divisions?</li> <li>• ACS?</li> </ul>	<ul style="list-style-type: none"> <li>◆ Clearly delineate roles and responsibilities for each organization as described on pages 3-18 and 3-19</li> <li>◆ In general, ITG focuses on enterprise applications, server hosting, security and overall Web architecture</li> <li>◆ Departments concentrate on LAN support, departmental applications, desktop support, and departmental strategic IT planning</li> <li>◆ Clearly communicate ACS infrastructure and support responsibilities as the contract becomes operational</li> <li>◆ Conduct an IT job classification study to better align job duties with classifications, evaluate compensation, and reclassify staff if needed</li> </ul>

# [ Linkage of Strategic Issues and Recommendations ]

## STRATEGIC DIRECTION

3

STRATEGIC IT ISSUES	KEY RECOMMENDATIONS
② What major State-wide applications need investment?	<ul style="list-style-type: none"><li>◆ Invest in State-wide financial management, payroll, budget, and human resources applications to replace aging AKPAY and AKSAS applications</li><li>◆ Improve email/calendaring software by updating departments running the State's standard application to a version or product which integrates calendar and email functionality – migrate other departments to this standard if adequate functionality is apparent</li><li>◆ Develop a State-wide approach to the Web and e-Government that provides a common look and feel, effective search engines, and efficient navigational paths across all departments/functions</li><li>◆ Staff a GIS coordinator position to spearhead establishing State-wide GIS standards, and facilitate data cleanup activities in support of standards</li></ul>

# [ Linkage of Strategic Issues and Recommendations ]

## STRATEGIC DIRECTION

3

STRATEGIC IT ISSUES	KEY RECOMMENDATIONS
③ How can IT leadership and decision making better support future IT needs?	<ul style="list-style-type: none"><li>◆ Strengthen staffing and resources dedicated to support of the TIC</li><li>◆ Plan for the creation of a cabinet-level Office of the Chief Information Officer (CIO), as described on page 3-11<sup>1</sup></li><li>◆ Implement a new enterprise IT decision-making process with the associated roles and responsibilities detailed on page 3-18</li><li>◆ Require each department to prepare its own strategic IT plan to document departmental IT priorities and align IT investments with business objectives, working within the overall framework of the State-wide IT plan</li></ul>

# Linkage of Strategic Issues and Recommendations

## STRATEGIC DIRECTION

STRATEGIC IT ISSUES	KEY RECOMMENDATIONS
④ What opportunities exist, if any, for realizing IT economies of scale?	<ul style="list-style-type: none"> <li>◆ Develop departmental IT strategic plans to document departmental IT priorities and align IT investments with business objectives, working within the overall framework of the State-wide IT plan</li> <li>◆ Fund State-wide technology refresh for servers, workstations, and software<sup>2</sup></li> <li>◆ Plan for an Office of the CIO to provide full-time, enterprise IT leadership — examining opportunities for economies of scale as appropriate</li> <li>◆ Staff a GIS coordinator position to facilitate common GIS development for base maps, etc., thereby reducing redundant departmental efforts</li> </ul>
⑤ How can the State most effectively utilize, classify, and develop IT staff in a challenging labor environment?	<ul style="list-style-type: none"> <li>◆ Conduct an IT job classification study to define major issues, develop new job classifications (if needed), better align duties with job classifications, reclassify staff (if needed) and evaluate compensation levels</li> <li>◆ Develop an IT staffing transition plan to support aging technologies, including strategies for: <ul style="list-style-type: none"> <li>• Formal training</li> <li>• Contract support, if needed</li> <li>• Recruiting and retraining IT staff</li> </ul> </li> </ul>

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<sup>2</sup>It appears that the ISF could be used to accomplish this goal although departmental details would need to be worked out and identified in each department's strategic plan. If the ISF could allow departments to determine their individual refresh timelines and was independent of the ITG chargeback, it would work most effectively. If it cannot be used in this fashion, 3-7 another solution would be required.

# Linkage of Strategic Issues and Recommendations

## STRATEGIC DIRECTION

3

STRATEGIC IT ISSUES	KEY RECOMMENDATIONS
⑥ What can the State do to improve its approach to IT funding?	<ul style="list-style-type: none"><li>◆ <b>Revise the ITG charge-back model to more clearly communicate the linkage between services and charges, accommodate new ACS services, and improve customer understanding and reflect changes to ITG offerings</b></li><li>◆ <b>Fund State-wide technology refresh for servers, workstations, and software to:</b><ul style="list-style-type: none"><li>• Align with best practices</li><li>• Allow opportunities for realizing economies of scale</li><li>• Ensure funding is available for basic IT equipment and that all staff have necessary tools</li><li>• Promote a culture of planned technological change</li><li>• Reduce incompatibilities across the State's architecture</li></ul></li></ul>



# Linkage of Strategic Issues and Recommendations

## STRATEGIC DIRECTION

3

STRATEGIC IT ISSUES	KEY RECOMMENDATIONS
<p>⑦ How, and to what degree, should departmental IT initiatives align with the overall State-wide plan?</p>	<ul style="list-style-type: none"> <li>◆ <b>Require each department to develop its own strategic IT plan, to be updated every few years and including – at minimum – analysis of and approaches for:</b> <ul style="list-style-type: none"> <li>• IT staffing and organization</li> <li>• Business software</li> <li>• Hardware</li> <li>• System software</li> <li>• Connectivity</li> <li>• Alignment with the State-wide IT plan</li> <li>• Funding</li> <li>• Governance</li> <li>• Timeline/funding requirements for technology refresh</li> <li>• Key areas of need</li> <li>• Priority setting in alignment with business needs</li> </ul> </li> <li>◆ <b>Plan for an Office of the CIO with the responsibility for reviewing departmental strategic IT plans and coordination of interdepartmental efforts</b></li> </ul>

# Strategic Recommendations: Overview

**The remainder of this chapter provides more detailed strategic recommendations across the four key planning dimensions:**

- ◆ IT Service Delivery
- ◆ IT Decision Making
- ◆ Software Applications
- ◆ Technical Infrastructure

## Recommendations: IT Service Delivery

### STRATEGIC DIRECTION

- ◆ **Strengthen and bolster the TIC with dedicated staffing:**
  - Provide up to three dedicated staff, potentially using current ITG personnel
  - Enable the TIC to meet with greater frequency and regularity, and better address future IT needs
- ◆ **Plan for the creation of a cabinet-level Office of the CIO, that is independent of ITG, with responsibility for:**
  - State-wide IT leadership
  - Strategic oversight concerning the ACS contract
  - Strategic IT planning
  - Recommending State-wide IT policy to the TIC, including:
    - Security
    - Application and technology standards (including State-wide approach to the Web and technology refresh)
    - Disaster recovery
    - IT staff training and development
  - Providing quality assurance on major IT contracts and projects
  - Overseeing State-wide implementation of enterprise IT policy
  - State-wide IT budget review for all departments
  - Research and development – including the documentation and dissemination of best practices
  - A project management office that assists departments if requested
  - Major IT procurement assistance

## Recommendations: IT Service Delivery

### STRATEGIC DIRECTION

- ◆ **We make this recommendation in response to the level of State-wide IT coordination that will be required to carry out the enterprise-wide recommendations of this plan** — a single individual responsible and accountable for providing State-wide IT leadership will benefit the State by focusing on implementing effective IT strategies across the enterprise
- ◆ **The absence of a CIO is not aligned with best practices observed across the country:**
  - 40 of 50 states have a CIO providing state-wide IT leadership
  - In 1996, the federal government recognized the importance of enterprise IT leadership and responded through the Clinger-Cohen Act, mandating creation of CIO positions in all executive departments and agencies
  - Appendix D contains further information regarding current state CIO trends
- ◆ **We anticipate this office will require five to ten FTEs**

# Recommendations: IT Service Delivery (cont.)

## STRATEGIC DIRECTION

3

Clarify and communicate the roles of ITG, the departments and divisions, and ACS as described below:

<b>ITG</b>	<ul style="list-style-type: none"> <li>• Operate a high-availability data center, including: <ul style="list-style-type: none"> <li>• Server hosting</li> <li>• Mainframe operations</li> <li>• Backup/recovery</li> </ul> </li> <li>• Data/database administration – as needed</li> <li>• Security – as determined by State-wide policy</li> </ul>	<ul style="list-style-type: none"> <li>• State-wide email and calendaring</li> <li>• Personal productivity tools training and licensing (e.g., word processing, email, etc.)</li> <li>• State-wide Web architecture and applications, including design standards</li> </ul>
<b>Departments/Divisions</b>	<ul style="list-style-type: none"> <li>• Development and maintenance of department IT strategic plans</li> <li>• Local server support</li> <li>• Database administration</li> <li>• Departmental application development and support</li> <li>• Department and division R&amp;D – as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Department help desk and desktop support</li> <li>• Business application training</li> <li>• Asset management</li> <li>• Local network support not covered by the ACS contract</li> <li>• Web development</li> </ul>
<b>ACS</b>	<ul style="list-style-type: none"> <li>• State-wide help desk, as defined by contract</li> <li>• Telecommunications, as defined by contract</li> <li>• WAN, as defined by contract</li> </ul>	
<b>Shared: ITG/Departments</b>	<ul style="list-style-type: none"> <li>• Security administration</li> <li>• Disaster recovery planning</li> </ul>	

## Recommendations: IT Service Delivery (cont.)

### STRATEGIC DIRECTION

3

- ◆ **Identify and staff a single point of authority for GIS coordination – this position should, preferably, report to the CIO and focus on developing a unified approach to GIS across the State**
- ◆ **Conduct an IT job classification study to:**
  - Clearly define major issues
  - Develop new job classifications, if needed
  - Better align duties with job classifications
  - Reclassify, if needed
  - Evaluate compensation levels
- ◆ **Develop an IT staffing transition plan to support aging technologies, including strategies for:**
  - Formal training
  - Contract support, if needed
  - Recruiting and retraining IT staff
- ◆ **Take a more proactive approach to IT communication and customer service – including defining and reporting agreed-upon performance measures**

## Recommendations: IT Decision Making

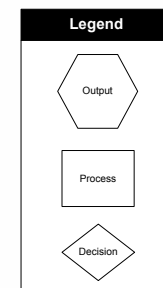
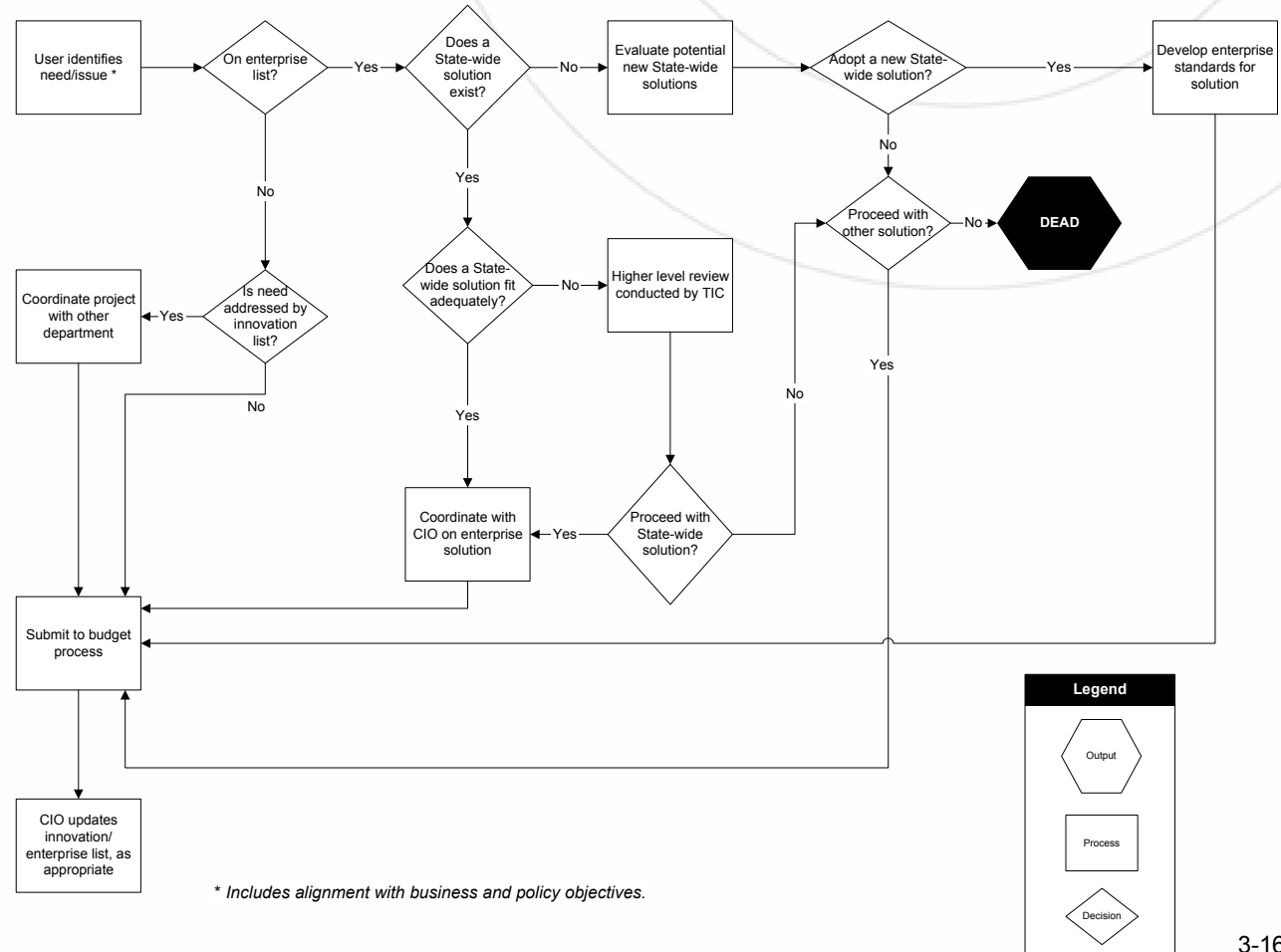
### STRATEGIC DIRECTION

- ◆ **Require each department to develop its own strategic IT plan, to be updated every few years and including – at minimum – analysis of and approaches for:**
  - IT staffing and organization
  - Business software
  - Hardware
  - System software
  - Connectivity
  - Alignment with State-wide IT plan
  - Funding
  - Governance
  - Timeline for technology refresh
  - Key areas of need
  - Priority setting in alignment with business needs
- ◆ **Revise the ITG charge-back model to:**
  - Improve customer understanding
  - Accommodate new ACS services
  - More clearly communicate linkage between services and charges
  - Reflect changes to ITG service offerings
- ◆ **Fund State-wide technology refresh for servers, workstations, and software to:**
  - Align with best practices
  - Allow opportunities for realizing economies of scale
  - Ensure funding is available for basic IT equipment and that all staff have necessary tools
  - Promote a culture of planned technological change
- ◆ **Ensure that sufficient staff support is dedicated to the TIC**

# Recommendations: IT Decision Making (cont.)

## STRATEGIC DIRECTION

- ◆ The model to the right presents the recommended decision-making model
- ◆ PTI developed the recommended model and associated roles and responsibilities in a facilitated workshop with the project's steering team





## Recommendations: IT Decision Making (cont.)

### STRATEGIC DIRECTION

The new IT decision-making process outlined on the previous page includes the use of an “*innovation list*” and an “*enterprise list*.” The following presents items to be included on these lists, developed at a workshop with the steering team members:

#### Innovation List

- ◆ Contains an inventory of recent innovations made by departments/agencies/ITG
- ◆ Provides a forum for questions
- ◆ Compiles work- in-progress and current status of IT initiatives
- ◆ Provides key contact information

#### Enterprise List

- ◆ Details applications areas potentially affecting multiple departments/divisions
- ◆ Contains an inventory of key data entities that transcend departmental boundaries

# Recommendations:

## IT Decision Making (cont.)

### STRATEGIC DIRECTION

The following pages present recommended roles and responsibilities associated with the new IT decision-making model:

#### TIC

- ◆ Establishes enterprise list
- ◆ Adopts new State-wide solutions
- ◆ Determines whether department must use State-wide solutions with support from TAC/ITG
- ◆ Takes an enterprise view
- ◆ Sets project priorities on a State-wide basis
- ◆ Makes recommendations to OMB

#### Department/Agency

- ◆ Identifies need/issue
- ◆ Documents and justifies project/need
- ◆ Determines whether solutions exist
- ◆ Sets agency priorities
- ◆ Advocates for projects
- ◆ Proceeds with other solutions
- ◆ Determines whether State-wide solution fits adequately
- ◆ Coordinates with State-wide solution/department solution (innovation list)
- ◆ Submits to budget process
- ◆ Responsible for implementation
- ◆ Identifies funding

#### TAC

- ◆ Provides technical review and advice
- ◆ Reviews/approves ITG recommendations regarding new State-wide solutions

#### Legislature

- ◆ Approves funding

## Recommendations: IT Decision Making (cont.)

### STRATEGIC DIRECTION

#### Recommended roles and responsibilities associated with the IT decision-making model (cont'd):

##### OMB

- ◆ Catalogs projects
- ◆ Reviews operating budget costs
- ◆ Advocates for projects
- ◆ Recommends funding limits
- ◆ Looks for commonalities across projects
- ◆ Makes specific recommendations to Governor
- ◆ Assists in finding money

##### CIO

- ◆ Chairs TIC
- ◆ Coordinates IT decision making
- ◆ Recommends State-wide policy to the TIC
- ◆ Provides enterprise IT leadership
- ◆ Reviews State-wide/departmental IT budgets
- ◆ Maintains enterprise list
- ◆ Evaluates and produces recommendations to TIC regarding the technical merit of proposed new State-wide solutions
- ◆ Develops enterprise standards for recommendation to TIC
- ◆ Maintains innovation list

##### ITG

- ◆ Provides technical support to TIC and TAC
- ◆ Assesses rate impacts

##### Governor

- ◆ Requests budget

## Recommendations: Applications

### STRATEGIC DIRECTION

- ◆ **Replace AKPAY/AKSAS — invest in State-wide financial management, payroll, and HR software applications**
- ◆ **While ABS is a relatively new application, the State will realize the benefits of enhanced integration by replacing the budget system along with the remainder of the financial management applications**
- ◆ **Develop a State-wide approach to the Web and e-Government, ensuring:**
  - A common look and feel
  - Availability of alternative navigational paths
  - Incorporation of an effective search engine
  - A common authentication schema
- ◆ **Improve State-wide GIS capabilities, including:**
  - Establishing State-wide GIS standards
  - Cleansing, coordinating, and sharing GIS data
- ◆ **Regarding enterprise email/calendaring:**
  - Upgrade departments operating State standard email/calendaring software to integrated email/calendaring software by updating the State-wide standard
  - Maintain current applications in place for departments utilizing integrated email/calendaring software
  - If the revised State standard meets the needs of departments operating non-standard applications, migrate those departments to the State standard

## Recommendations: Technical Infrastructure

- ◆ **Finalize and communicate ACS responsibilities, including:**
  - Specific connectivity demarcation points
  - Remote connectivity
  - Service levels
- ◆ **Develop a plan regarding the future of the mainframe; key considerations include:**
  - AKPAY/AKSAS likely to be replaced
  - Loss of critical skill sets
  - Impact on remaining departments
  - Financial viability
- ◆ **Implement a State-wide security plan which includes:**
  - Guidelines for users
  - Roles and responsibilities for departments, ITG, etc.
  - Procedures for intrusion detection and response
- ◆ **Develop a comprehensive State-wide disaster recovery plan**
- ◆ **Explore opportunities for server consolidation**
- ◆ **Continue working toward a more homogeneous technology environment (e.g., databases, desktop operating systems) – the State should not perpetuate deviance from standards**

# Ideal Application Architecture

## STRATEGIC DIRECTION

# 3

An “ideal application architecture” graphically depicts how the State-defined business functions might be automated in a “perfect world” (i.e., without cost and resource constraints). This section presents an ideal application architecture for the State, along with an analysis of “gaps” between existing and ideal business applications:

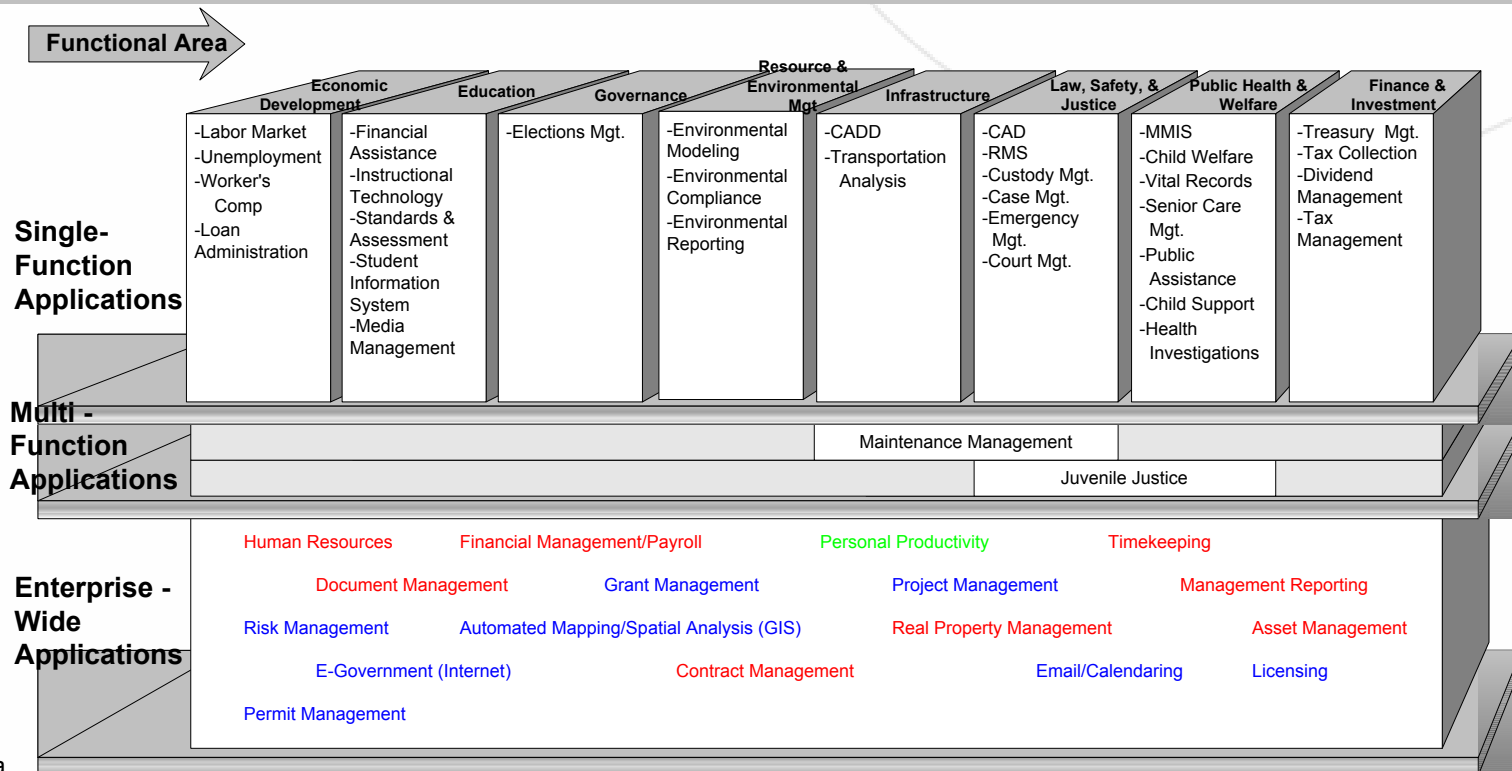
- ◆ The steering committee created a business function model in a workshop facilitated by Pacific Technologies
- ◆ The architecture uses the business function model, presented in Appendix E, as a foundation
- ◆ We grouped the ideal applications by major functional areas, and further characterized them as one of the following:
  - Single-function — supporting only one business area
  - Multi-function — support more than one, but not all, business areas
  - Enterprise-wide — supporting business functions across the State
- ◆ Appendix F contains detailed descriptions of the enterprise-wide ideal applications and associated gaps

# Ideal Application Architecture

## STRATEGIC DIRECTION

3

The chart below presents the ideal application architecture — color coding indicates the severity of the “gap” between the ideal applications and those currently in use at the State. For the purposes of this study, the primary focus was on enterprise and multi-function applications. Refer to Appendix F for more detail on Pacific Technologies’ gap analysis. Applications not explicitly evaluated here will require analysis at the departmental or divisional level.



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Number of  
Applications by  
Gap



# Prioritization Results

## STRATEGIC DIRECTION

3

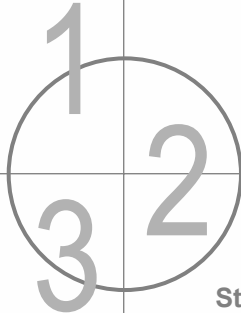
The table below presents the Steering Committee's application priorities, defined through a voting process. Both the gap evaluation and perceived business need drove the prioritization effort:

Rank	Ideal Applications	Gap	Votes
1	E-Government (Internet)	Moderate	22
1	Human Resources	Severe	22
3	Financial Management/Payroll	Severe	19
4	Timekeeping	Severe	15
5	Asset Management	Severe	10
5	Automated Mapping/Spatial Analysis (GIS)	Moderate	10
7	Email/Calendar	Moderate	9
8	Document Management	Severe	7
9	Licensing	Moderate	5
10	Real Property Management	Severe	4
11	Contract Management	Severe	3
12	Permit Management	Moderate	2
13	Grant Management	Moderate	1
13	Management Reporting	Severe	1
13	Project Management	Moderate	1
16	Risk Management	Moderate	0
16	Personal Productivity	Minimal	0



# CHAPTER 4

Assessment



Strategy  
Development

Implementation  
Planning

[ implementation  
plan

State of Alaska  
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# Overview

## IMPLEMENTATION PLAN

# 4

**Based on the strategic direction described in Chapter 3, Pacific Technologies developed a series of key projects aimed at improving Alaska's software applications, IT service delivery, IT decision making, and technical architecture.**

**This chapter outlines those projects, cost estimates, and the attendant schedule necessary to implement the plan's major recommendations. It presents:**

- ◆ Summary of Projects
- ◆ Estimated Project Costs
- ◆ Project Schedule
- ◆ Long-Term Cost Estimates
- ◆ Benefits

# Summary of Projects

## IMPLEMENTATION PLAN

4

Alaska's major enterprise IT needs can be addressed over the next three to five years with the following projects:

- A. Provide Dedicated Staffing to the TIC
- B. Plan the Creation of an Office of the CIO
- C. Revise ITG Chargeback Model
- D. Develop Department IT Strategic Plans
- E. Develop State-wide Information Technology Refresh Funding Approach
- F. Develop an Enterprise e-Government Approach
- G. Implement New State-wide IT Decision- Making Model
- H. Select New Financial Management/HR Software
- I. Plan Integrated Email and Calendaring Approach
- J. Develop State-wide IT Security Plan
- K. Develop State-wide IT Disaster Recovery Plan
- L. Conduct Mainframe Impact Analysis
- M. Conduct IT Job Classification Study

The following pages present summary descriptions for each project in the Information Technology Plan. Refer to Appendix A for more detailed descriptions of each project.

# Summary of Projects

## IMPLEMENTATION PLAN

4

The following table briefly describes the projects and lists the potential benefits of implementing each. Note: the projects are not presented in order of priority.

ID	Project Name/Description	Benefits
A.	<b>Provide Dedicated Staffing to the TIC</b> – provides up to three permanent staff to support the TIC	<ul style="list-style-type: none"> <li>◆ Helps ensure that the State's primary IT governance body is positioned to address complex IT initiatives on a timely basis</li> </ul>
B.	<b>Plan the Creation of an Office of the CIO</b> – plans for the creation of a cabinet-level office of the CIO (5 to 10 FTEs) to enhance and focus enterprise-level IT leadership; also charts GIS and e-Government coordinator positions to work within this office	<ul style="list-style-type: none"> <li>◆ Addresses the opportunity for improved State-wide IT leadership and coordination</li> <li>◆ Aligns Alaska with best practices</li> <li>◆ Establishes State-wide GIS standards, and facilitates coordination of efforts</li> <li>◆ Improves IT cost and labor efficiency</li> </ul>
C.	<b>Revise ITG Charge-Back Model</b> – clarifies the charge-back model to improve communication and increase understanding of services offered; and provide direct linkages between ITG services and charges	<ul style="list-style-type: none"> <li>◆ Improves customer understanding and acceptance of ITG offerings; accommodates new ACS services</li> <li>◆ Promotes accountability</li> </ul>
D.	<b>Develop Department IT Strategic Plans</b> – documents and improves alignment of departmental IT priorities and IT investments with business objectives, working within the overall framework of (and providing input to) the State-wide IT plan	<ul style="list-style-type: none"> <li>◆ Ensures a consistent approach to documenting IT needs</li> <li>◆ Fosters more informed IT decision making</li> <li>◆ Improves efficiency and effectiveness of IT investments at departments, and State-wide</li> <li>◆ Aligns departmental IT investments with department business needs</li> </ul>

# Summary of Projects (cont.)

## IMPLEMENTATION PLAN

4

ID	Project Name/Description	Benefits
E.	<b>Develop State-wide IT Refresh Funding Approach</b> – initiates and funds a proactive State-wide refresh of technology infrastructure at predictable intervals, including desktop PCs, servers, and personal productivity software	<ul style="list-style-type: none"> <li>◆ Offers potential for economies of scale</li> <li>◆ Reduces support costs</li> <li>◆ Ensures up-to-date IT tools for users</li> <li>◆ Makes IT refresh a predictable business expense</li> </ul>
F.	<b>Develop an Enterprise e-Government Approach</b> – implements the framework and infrastructure to facilitate Alaska's defined goal state for the Web (including more services on the Web, increased availability of documents, greater efficiency in doing business with the State, and improved navigation and a common "look and feel" for the website across all departments)	<ul style="list-style-type: none"> <li>◆ Improves customer service and availability of key services</li> <li>◆ Establishes an enterprise architecture for e-Government at the State</li> <li>◆ Reduces costs associated with providing some services</li> <li>◆ Promotes a positive State image</li> <li>◆ Creates a "customer-centric" website that is easier to use and navigate</li> </ul>
G.	<b>Implement New State-wide IT Decision-Making Model</b> – puts into place the new decision-making process modeled by the steering committee during the planning process	<ul style="list-style-type: none"> <li>◆ Improves decision making around technology investments</li> <li>◆ Enhances communication and participation surrounding the IT decision-making process</li> <li>◆ Ensures IT investments are aligned with business needs</li> </ul>

# Summary of Projects (cont.)

## IMPLEMENTATION PLAN

4

ID	Project Name/Description	Benefits
H.	<b>Select New Financial Management/HR Software</b> – defines requirements and develops RFP, conducts evaluation, and selects a software solution for the State's payroll, financial management, asset management, timekeeping, and human resources management functionality	<ul style="list-style-type: none"> <li>◆ Positions Alaska to invest in State-wide timekeeping, payroll, and human resources applications to address under-automated areas, and replace aging applications that lack functionality</li> <li>◆ Creates consensus on requirements</li> <li>◆ Clarifies understanding of costs</li> <li>◆ Improves ability to generate meaningful management information in a timely fashion</li> <li>◆ Improves productivity and efficiency in financial management efforts</li> </ul>
I.	<b>Plan Integrated Email and Calendaring Approach</b> – updates the State's standard email and calendaring system to offer users an integrated, more functional package	<ul style="list-style-type: none"> <li>◆ Positions the State to improve email/calendaring functionality</li> <li>◆ Fosters enhanced communication statewide</li> </ul>
J.	<b>Develop State-wide IT Security Plan</b> – completes the effort initiated by the State and includes a review by a third-party IT security specialist	<ul style="list-style-type: none"> <li>◆ Protects the State's valuable information technology assets</li> <li>◆ Addresses heightened concerns regarding homeland security</li> </ul>

# Summary of Projects (cont.)

## IMPLEMENTATION PLAN

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ID	Project Name/Description	Benefits
K.	<b>Develop State-wide IT Disaster Recovery Plan</b> – prepares a plan for IT disaster recovery at the State-wide level, including responsible parties, costs, and overall approach	<ul style="list-style-type: none"> <li>◆ Prepares the State to rapidly redeploy information technology resources following a catastrophic event</li> <li>◆ Addresses heightened concerns regarding homeland security</li> </ul>
L.	<b>Conduct Mainframe Impact Analysis</b> – analyzes the long-term impact on the mainframe and its customers replacing the State's core software, and makes associated recommendations; this effort also drafts a transition plan for staff impacted by this transition	<ul style="list-style-type: none"> <li>◆ Clarifies the options and ramifications of the various scenarios involving the State's mainframe resources</li> <li>◆ Articulates an agreed-upon direction for the State's core computing platform</li> </ul>
M.	<b>Conduct IT Job Classification Study</b> – conducts a classification study to align job responsibilities with job descriptions and review IT compensation strategies at the State, including defining major issues, developing new job classifications (if needed), and reclassification of staff (if needed); also includes a staff transition plan to implement the study's recommendations	<ul style="list-style-type: none"> <li>◆ Ensures staff are appropriately classed and compensated</li> <li>◆ Improves IT recruiting process</li> <li>◆ Creates and documents a proactive approach to changes in the IT staff environment at the State</li> </ul>

# [Estimated Project Costs]

## IMPLEMENTATION PLAN

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- ◆ **Pacific Technologies prepared cost estimates for the recommended projects to assist the State in planning its implementation of the strategic plan**
- ◆ **The following page presents lower and upper-end one-time (capital) cost estimates for each**
- ◆ **These estimates do not include internal labor costs the State would incur as a result of implementing the projects, with the exception of Project A**
- ◆ **Further detail regarding the projects, including assumptions used in preparing cost estimates, appear in Appendix A**



# One –Time Cost Estimates

## IMPLEMENTATION PLAN

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- ◆ The table to the right presents upper and lower one-time cost estimates for the implementation of each recommended project
- ◆ Internal labor dollars are not included in the costs presented to the right – except for Project B, which includes burdened rates for seven FTEs, including the CIO<sup>1</sup>
- ◆ Costs presented include any funds which may already be budgeted
- ◆ Analysis of “hard dollar” benefits is outside the scope of this planning effort

Projects		One-Time Costs	
		Lower	Upper
A	Provide Dedicated Staffing to the TIC	\$ -	\$ -
B	Plan the Creation of an Office of the CIO	\$ -	\$ 100
C	Revise ITG Chargeback Model	\$ -	\$ 90
D	Develop Department IT Strategic Plans	\$ 500	\$ 2,700
E	Develop State-wide IT Refresh Funding Approach	\$ -	\$ 60
F	Develop an Enterprise e-Government Approach	\$ 38	\$ 500
G	Implement New State-wide IT Decision-Making Model	\$ -	\$ 36
H	Select New Financial Management/HR Software	\$ 300	\$ 750
I	Plan Integrated Email and Calendaring Approach	\$ -	\$ 100
J	Develop State-wide IT Security Plan	\$ 12	\$ 51
K	Develop State-wide IT Disaster Recovery Plan	\$ 120	\$ 240
L	Conduct Mainframe Impact Analysis	\$ 161	\$ 266
M	Conduct IT Job Classification Study	\$ 161	\$ 281
<b>Total - All Projects</b>		<b>\$ 1,292</b>	<b>\$ 5,175</b>

Note: Costs are in thousands

<sup>1</sup>Project B assumes the balance of the staff will be transferred from other State positions.

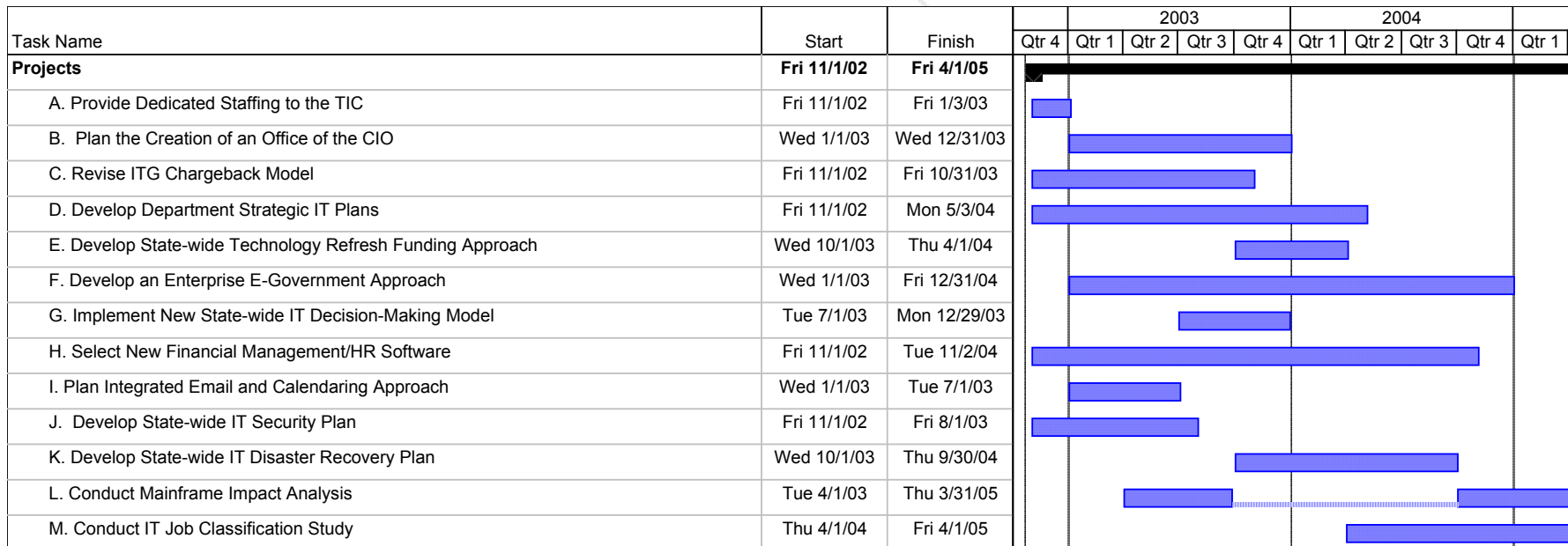
Note: Project A assumes no one-time costs associated with providing staff support to the TIC.

# Project Schedule

## IMPLEMENTATION PLAN

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The Gantt chart presented below displays the initial projected timeline for implementation. The State will need to review and make adjustments to the timeline over the planning horizon based on resource constraints and changing business needs.



**Note:** The majority of these projects lay the strategic groundwork for additional IT effort and investment. To provide the State a more comprehensive picture of downstream investment requirements, the table on the following page highlights the major long-term cost estimates associated with implementing these initial, foundation-building projects.

# Long-Term Cost Estimates

## IMPLEMENTATION PLAN

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The table below articulates the major *long-term cost* estimates and labor impacts associated with implementing the projects in this plan. For example, Project I – Plan Integrated Email and Calendaring Approach, actually represents a “two-phase” effort. The first phase focuses on developing an agreed-upon path for improving integration across the State’s email and calendaring systems. One-time costs presented on page 4-8 provide an estimate for that effort. The following table presents estimates for *implementing* that approach (e.g., implementation costs of \$1,876,000 to \$8,737,000 and annual software maintenance costs of \$181,000 – along with associated implementation and annual labor estimates). The reader should bear in mind that these are preliminary estimates, provided purely for planning purposes, and will require revision as implementation of the plan progresses.

Projects	Implementation Costs		Annual Costs	Duration	Implementation Staff Hours	Recurring Staff Hours
	Lower	Upper				
<b>A</b> Ongoing Operation of the TIC*	\$ -	\$ -	\$ 195	duration	0	6,000
<b>B</b> Ongoing Operation of the Office of the CIO	\$ -	\$ 46	\$ 1,500	ongoing	0	12,600
<b>C</b> Revise ITG Chargeback Model	\$ -	\$ -	\$ -	none	0	0
<b>D</b> Ongoing Development of Department IT Strategic Plans**	\$ -	\$ -	TBD	5 years	TBD	TBD
<b>E</b> Implement State-wide IT Refresh Funding***	\$ -	\$ 20,000	\$ 10,000	ongoing	150	35,000
<b>F</b> Implement an Enterprise E-Government Approach	\$ 2,300	\$ 4,500	\$ 250	2 years	100,000	15,000
<b>G</b> Implement New State-wide IT Decision-Making Model	\$ -	\$ -	\$ -	none	0	0
<b>H</b> Implement New Financial Management/HR Software	\$ 40,000	\$ 90,000	\$ 10,000	3 years	300,000	40,000
<b>I</b> Implement Integrated Email and Calendaring Approach	\$ 1,876	\$ 8,737	\$ 181	ongoing	12,387	TBD
<b>J</b> Implement State-wide IT Security Plan	\$ 110	\$ 225	\$ 90	ongoing	500	500
<b>K</b> Implement State-wide IT Disaster Recovery Plan	\$ 325	\$ 500	\$ 500	ongoing	520	0
<b>L</b> Implement Mainframe Impact Analysis Recommendations	\$ 30,000	\$ 40,000	\$ 3,000	5 years	156,000	TBD
<b>M</b> Implement IT Job Classification Study Recommendations	\$ -	\$ 2,144	\$ 2,144	none	0	0
<b>Total - All Projects</b>	<b>\$ 74,611</b>	<b>\$ 166,153</b>	<b>\$ 27,666</b>		<b>569,557</b>	<b>103,100</b>

Note: Costs (not hours) are in thousands

\*In the event positions to support the TIC cannot be found internally, this table presents incremental annual costs

\*\*Dependent on specific department needs

\*\*\*May require significant upfront investment to fund departments that have not recently made these upgrades

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# Benefits

## IMPLEMENTATION PLAN

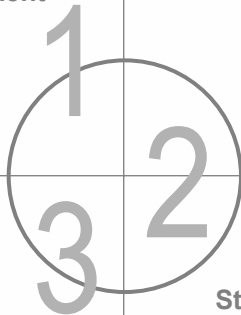
4

**Implementing this plan's projects yields the following key benefits:**

- ◆ **Improved State-wide IT leadership and coordination, across the State and within the departments**
- ◆ **Economies of scale and reduced support costs for State desktops**
- ◆ **A solid foundation for future e-Government initiatives**
- ◆ **Enhanced IT decision making that aligns department and State IT investments with key business priorities**
- ◆ **Upgraded applications that improve staff efficiency and service to the State's customers**
- ◆ **A more secure and recoverable technical infrastructure**
- ◆ **A proactive approach to IT staffing**

# APPENDIX A

Assessment



Strategy  
Development

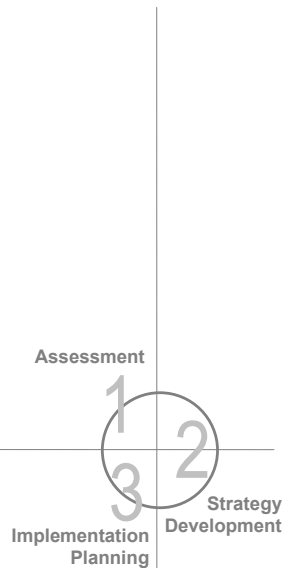
Implementation  
Planning

project  
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## PROJECT DESCRIPTIONS

This section presents descriptions of the strategic projects Pacific Technologies and the State's IT plan steering committee identified over the course of this engagement. Pacific Technologies developed the cost estimates based on market research as well as our experience with other clients. The projects are:

- A. Provide Dedicated Staffing to the TIC
- B. Plan the Creation of an Office of the CIO
- C. Revise ITG Charge-back Model
- D. Develop Department IT Strategic Plans
- E. Develop State-wide IT Refresh Funding Approach
- F. Develop an Enterprise e-Government Approach
- G. Implement New State-wide IT Decision-Making Model
- H. Select New Financial Management/HR Software
- I. Plan Integrated Email and Calendaring Approach
- J. Develop State-wide IT Security Plan
- K. Develop State-wide IT Disaster Recovery Plan
- L. Conduct Mainframe Analysis
- M. Conduct Job Classification Study

The following presents a profile of each strategic project, organized by:

- ◆ Associated Findings
- ◆ Impacts
- ◆ Recommended Project Description
- ◆ Benefits
- ◆ Cost Assumptions

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A – Provide Dedicated Staffing to the TIC			
One Time Costs	Lower: \$0	Project Start:	4 <sup>th</sup> Qtr 2002
	Upper: \$0	Project Duration:	3 months
<b>Associated Findings:</b> The body chartered with providing enterprise-wide strategy, the TIC, has no dedicated staff to support its activities.			
<b>Impacts:</b> <ul style="list-style-type: none"> <li>Chartered body is unable to meet as often as desired</li> <li>Insufficient support for IT leadership going forward</li> </ul>			
<b>Recommended Project:</b> This project creates up to three permanent positions to work in support of the TIC, which will likely be staffed from the ranks of ITG.			
<b>Benefits:</b> <ul style="list-style-type: none"> <li>Greater capability to address State-wide IT needs</li> <li>More timely action from this key decision-making body</li> </ul>			
<b>Cost Assumptions:</b> Initial costs are predicated on the assumption that staff support can be provided by personnel transferred from the ITG, at no cost to the State.			
<b>Long-term Implementation Costs:</b>		Lower: \$0	Implementation Staff Hours: 0
		Upper: \$0	Recurring Staff Hours: 6,000
		Annual: \$195,000	Duration: Ongoing
In the event that personnel are not available to staff the TIC from ITG, ongoing annual costs reflect <i>incremental</i> fully-burdened costs for three new employees (working full time) of \$65,000 each.			

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**B – Plan the Creation of an Office of the CIO**

<b>One Time Costs</b>	<b>Lower: \$0</b>	<b>Project Start:</b>	<b>1<sup>st</sup> Qtr 2003</b>
	<b>Upper: \$100,000</b>	<b>Project Duration:</b>	<b>12 months</b>

**Associated Findings:**

Without a single focal point for State-wide IT leadership, Alaska misses opportunities for cross-departmental cooperation and IT innovation on an enterprise-wide basis – leading to the possibility of redundant effort and unnecessary expense. The body chartered with providing enterprise-wide strategy, the TIC, has no dedicated staff to support its activities. There is currently no mechanism for assessing total IT spending at the State-wide level, and no functional process to coordinate or align departmental and agency IT initiatives with enterprise-wide goals, nor seek economies of scale.

**Impacts:**

- ◆ Insufficient support for IT leadership going forward
- ◆ Difficult to obtain and maintain an accurate, enterprise-wide view of total IT spending
- ◆ Opportunities for efficiencies and economies of scale are lost

**Recommended Project:**

This project conducts the planning necessary for the creation of a cabinet-level office of the CIO, and charters GIS and e-Government coordinator positions to work within this office. We recommend staffing the office with five to ten FTEs, many of which may be transferred from ITG and the departments. This office's responsibilities will include State-wide IT leadership, strategic oversight of the ACS contract, recommending policy to the TIC, major IT project quality assurance, IT project management assistance, IT budget review, research and development, and major IT procurement assistance.

**Benefits:**

- ◆ Increased accountability for IT spending
- ◆ Increased levels of coordination and data sharing between State entities
- ◆ Improved linkage between IT initiatives and State business objectives
- ◆ Clear State-wide IT vision and direction

**Cost Assumptions:**

Planning costs range from zero to \$100,000 to pay for consulting assistance in this effort.

<b>Long-term Implementation Costs:</b>	<b>Lower: \$0</b>	<b>Implementation Staff Hours:</b>	<b>0</b>
	<b>Upper: \$46,200</b>	<b>Recurring Staff Hours:</b>	<b>12,600</b>
	<b>Annual: \$1,500,000</b>	<b>Duration:</b>	<b>Ongoing</b>

Annual costs reflect a budget of \$1,500,000 for the operation of the office. It assumes that a CIO will earn between \$115,000 and \$154,000. We have applied a burdened rate of 30%, resulting in a fully burdened cost of \$150,000 to \$200,000. Costs presented include 30% for executive search services. A recent NASCIO survey of CIO salaries (presumably unburdened) indicated that 5 of 28 responding states compensated CIOs in excess of \$100,000. Great variance exists in compensation for executive technology positions. The burdened salary for the City of Seattle's Chief Technology Officer is roughly \$175,000, while 4 of the 28 responding states indicated salaries between \$61,000 and \$70,000. The State will clearly need to apply local factors when determining appropriate compensation, the range provided, however, should allow the State to attract appropriate talent to fill this position. A burdened rate of \$80,000 is assumed for six other new FTEs. The lower estimate assumes three new FTEs in addition to the CIO. Recurring staff hours are based on ten full-time employees.





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### C – Revise ITG Charge-back Model

One Time Costs	Lower: \$0	Project Start:	4 <sup>th</sup> Qtr. 2002
	Upper: \$90,000	Project Duration:	12 months

#### Associated Findings:

Customers perceive the ITG charge-back model as:

- ◆ Difficult to understand
- ◆ Too expensive
- ◆ Not directly tied to services received
- ◆ The ACS contract and realignment of IT responsibilities will further confuse the charge-back model.

#### Impacts:

- ◆ Difficulty understanding the charge-back model leads to resentment at the department level; departments don't feel they are getting services commensurate with the charges incurred
- ◆ Unclear charge-back model discourages use of ITG by departments

#### Recommended Project:

This project examines the ITG charge-back model in light of the ACS contract and other changes to IT service provision within the State. The goal of the project is to arrive at a model for allocating ITG costs that clearly ties charges to the services provided and communicates these charges to the departments in a concise, understandable manner. The State may choose to conduct this project entirely in-house or hire a consultant to take a fresh look at cost drivers and develop an appropriate model.

#### Benefits:

- ◆ Improves customer understanding and acceptance of ITG offerings, accommodates new ACS services
- ◆ Promotes accountability

#### Cost Assumptions:

- ◆ The lower end of the cost range assumes the effort is provided entirely by internal staff at no incremental cost to the State. The upper end of the cost range assumes the State hires a contractor at \$150/hour for 600 hours to revise the model. No recurring costs are associated with this effort.

◆	<b>Long-term Implementation Costs:</b>	Lower: \$0	Implementation Staff Hours:	0
		Upper: \$0	Recurring Staff Hours:	0
		Annual: \$0	Duration:	None

No long-term implementation costs are associated with this project.

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**D – Develop Department IT Strategic Plans**

<b>One Time Costs</b>	<b>Lower: \$500,000</b>	<b>Project Start:</b>	<b>4<sup>th</sup> Qtr. 2002</b>
	<b>Upper: \$2,700,000</b>	<b>Project Duration:</b>	<b>18 months</b>

**Associated Findings:**

- ◆ Agencies, departments and divisions make IT decisions autonomously
- ◆ No enterprise-wide tracking of IT spending presently occurs
- ◆ No process is in place for examining potential economies of scale

**Impacts:**

- ◆ The State fails to realize potential cost savings associated with a coordinated procurement approach
- ◆ Lack of departmental strategic plans may lead to fractured technical and application architectures, reducing efficiency of State staff

**Recommended Project:**

This project results in the development of strategic IT plans by each of the departments. The framework of the departmental plans would be directed by the State's CIO but would minimally include analysis and approaches for: IT staffing and organization, applications, hardware, connectivity, alignment with the State IT plan, funding, governance, timelines and requirements for technology refresh, and priority setting for IT projects. Arising out of the planning effort, each department would identify its own particular technology investment needs. While some departments may have substantial IT needs, others may not.

**Benefits:**

- ◆ Improved application and technical architectures at the departmental level
- ◆ Greater likelihood of achieving cost savings through procurement economies of scale
- ◆ Better coordination of IT efforts across the State

**Cost Assumptions:**

The lower end of the cost range (\$500K) assumes that the State hires consultants to prepare IT strategic plans for 6 of the 18 departments at an average cost of roughly \$83,000 each. The remaining departments are assumed to conduct them without outside assistance. The upper end of the cost range (\$2.7 million) assumes that all 18 departments hire consultants at an average cost of \$150,000 per department.

<b>Long-term Implementation Costs:</b>	Lower: \$0	Implementation Staff Hours:	0
	Upper: \$0	Recurring Staff Hours:	0
	Annual: \$0	Duration:	None

Long term costs associated with this project are dependent on the specific needs of the individual departments.

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**E – Develop State-wide IT Refresh Funding Approach**

Lower: \$0	Project Start:	4 <sup>th</sup> Qtr 2003
Upper: \$60,000	Project Duration:	6 months

**Associated Findings:**

- ◆ No enterprise-wide technology refresh policy or funding exists
- ◆ No process is in place to examine potential economies of scale

**Impacts:**

- ◆ The State fails to realize potential cost savings associated with coordinated procurement efforts
- ◆ Replacement needs may result in a significant, unexpected budgetary shortfall

**Recommended Project:**

This project develops a planned approach for funding the State's information technology infrastructure. The project starts by defining the mechanisms by which the refresh funding will occur. It appears that the Information Services Fund (ISF) could be used for this purpose, although departmental details would need to be resolved. This mechanism will also define how funding will be allocated and spent. The second part of the project determines acceptable price and timeline ranges for replacement of various components, including PCs, servers, and some networking components. In their IT strategic plans, the departments will identify their exact needs. These should follow common industry practices (e.g., 3-4 years for PC, and 3-5 years for servers), tailored to match the specific needs of the State. This effort will likely lead to the creation of a managed financial pool, requiring significant ongoing and upfront investment.

**Benefits:**

- ◆ Ensures a consistent approach to documenting IT needs
- ◆ Fosters more informed IT decision making
- ◆ Improves efficiency and effectiveness of IT investments at departments, and State-wide

**Cost Assumptions:**

The lower end of the one-time cost range assumes the State performs this project internally. The upper-end cost is based on the State using an external contractor or consultant averaging \$150/hr for 400 hours.

<b>Long-term Implementation Costs:</b>	Lower: \$0	Implementation Staff Hours:	150
	Upper: \$20,000,000	Recurring Staff Hours:	35,000
	Annual: \$10,000,000	Duration:	Ongoing

Implementation costs associated with funding the plan assume the State replaces all PCs every three years and all servers every 4-7 years, depending on type and usage. The upfront estimate of \$20 million seeds the fund, leading to approximately \$10 million of recurring annual contributions.

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**F – Develop an Enterprise e-Government Approach**

<b>One Time Costs</b>	<b>Lower: \$38,000</b>	<b>Project Start:</b>	<b>1<sup>st</sup> Qtr 2003</b>
	<b>Upper: \$500,000</b>	<b>Project Duration:</b>	<b>24 months</b>

**Associated Findings:**

- ◆ No overall coordinated approach to the Web exists at the State
- ◆ The State’s existing Web presence has significant levels of functionality, but lacks a consistent look and feel or common navigation aids, and is organized along departmental lines

**Impacts:**

- ◆ The State is missing the opportunity to take full advantage of this technology
- ◆ Each department develops its own Web technologies, effectively “re-inventing the wheel”

**Recommended Project:**

This project develops a comprehensive, coordinated approach for handling e-Government at the State. Key topics will include developing a common look and feel, creating standards for documents and development, defining a customer-centric approach to navigation, and identifying an approach to content management. The plan also identifies roles and responsibilities across the State, as well as a centralized staffing approach, if appropriate. Additionally, this effort will identify the State’s Web architecture, including a single payment and search mechanism. Lastly, the plan identifies an implementation approach that the CIO’s office will oversee. Following the State’s development of this approach, the first key projects of implementing the governance structures, and creating and deploying common Web tools and a standard look and feel, will require a moderate investment of time and resources.

**Benefits:**

- ◆ Improves customer service
- ◆ Reduces the State’s cost to provide some services
- ◆ 7 x 24 availability of key State services
- ◆ Easier to use and navigate
- ◆ Positions the State as a technology leader in this arena

**Cost Assumptions:**

This project assumes the State will require external assistance in developing this approach. At the lower end (\$38,000), the State procures 250 hours of assistance from industry experts to ensure the new approach is aligned with the direction of the market. At the higher estimate (\$500,000), a consultant provides over 3000 hours to develop the approach entirely, further develop implementation plans for key parts of the approach, and conduct a customer survey to ensure the State’s approach is aligned with the customers’ needs.

<b>Long-term Implementation Costs:</b>	Lower: \$2,300,000	Implementation Staff Hours:	0
	Upper: \$4,500,000	Recurring Staff Hours:	0
	Annual: \$250,000	Duration:	None

Implementation costs after the planning effort include additional hardware and software, as well as implementation services required to put in place basic tools and design and implement a common look, feel, and navigation approach for the State’s online presence. The relatively wide cost variation reflects a myriad of options for the State, around platform, software, and amount of labor outsourced in conducting these efforts – decisions that will be made in defining the e-Government approach.

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**G – Implement New State-wide IT Decision-Making Model**

<b>One Time Costs</b>	<b>Lower: \$0</b>	<b>Project Start:</b>	<b>3<sup>rd</sup> Qtr 2003</b>
	<b>Upper: \$36,000</b>	<b>Project Duration:</b>	<b>6 months</b>

**Associated Findings:**

- ◆ Decision making tends to emphasize cost versus overall value
- ◆ No enterprise-wide tracking of IT spending occurs
- ◆ Too much responsibility for State-wide IT leadership falls to the TIC
- ◆ Many departments bypass the TIC

**Impacts:**

- ◆ Lack of a fully-functioning State-wide IT policy body leads to a corresponding lack of IT vision and coordination
- ◆ Focus on cost instead of value can result in decisions that are “penny-wise and pound-foolish”
- ◆ The State cannot truly assess its total IT costs

**Recommended Project:**

After modeling the current decision-making process with the steering team, we crafted a formal process to serve as its replacement – outlined in Chapter 3 of the plan. This project puts this enhanced process, and associated tool, roles, and responsibilities, into place.

**Benefits:**

- ◆ Improves technology investment decision making
- ◆ Enhances communication and participation surrounding the IT decision-making process
- ◆ Ensures IT investments are aligned with business needs

**Cost Assumptions:**

This upper end of the cost range assumes the State will require external assistance in implementing this model. Consulting assistance totaling 240 hours at \$150/hr is assumed at the upper end. At the lower end, the State is assumed to implement the new IT decision-making process without external assistance, and at no incremental cost.

<b>Long-term Implementation Costs:</b>	Lower: \$0	Implementation Staff Hours:	0
	Upper: \$0	Recurring Staff Hours:	0
	Annual: \$0	Duration:	None

No long-term or recurring costs are associated with this project.

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**H – Select New Financial Management/HR Software**

<b>One Time Costs</b>	<b>Lower: \$300,000</b>	<b>Project Start:</b>	<b>4<sup>th</sup> Qtr 2002</b>
	<b>Upper: \$750,000</b>	<b>Project Duration:</b>	<b>24 months</b>

**Associated Findings:**

The State's existing enterprise applications (AKSAS, AKPAY, etc.) are old and in need of replacement. They cover only basic financial and payroll activities, leaving more advanced human resources and timekeeping functionality to largely manual efforts or local applications. Existing automation cannot support most of the more complex functions common in modern financial management systems (FMS) and human resources information systems (HRIS) software packages. In addition, the State's applications were developed years ago using technologies that require support skills which are becoming increasingly scarce in a challenging job market.

**Impacts:**

- ◆ The State is increasingly at risk as these systems become harder to maintain, and skilled support becomes harder to find
- ◆ State business practices are impeded due to limited available functionality

**Recommended Project:**

This project formally initiates the effort to replace the State's aging core enterprise administrative applications. The project entails hiring a consultant to help the State develop functional requirements for financial management, budget management, payroll, human resources, and asset management systems – a set of functionality the State should expect to find in a single vended solution. Based on the results of that effort, the State will work either internally, or with the assistance of the consultant, to procure the solution. Resulting from this project, the State will purchase and implement this solution – an effort with a very significant resource and financial impact.

**Benefits:**

- ◆ Positions Alaska to invest in State-wide core business applications to address under-automated areas, and replace aging applications that lack functionality
- ◆ Creates consensus on requirements
- ◆ Clarifies understanding of costs

**Cost Assumptions:**

The lower and upper cost estimates reflect a wide range of consultant hours (2000-5000). The lower end assumes developing high-level requirements only. The upper estimate assumes the consultant develops detailed requirements and assists the State by developing an RFP and conducting the procurement.

<b>Long-term Implementation Costs:</b>	Lower: \$40,000,000	Implementation Staff Hours:	300,000
	Upper: \$90,000,000	Recurring Staff Hours:	40,000
	Annual: \$10,000,000	Duration:	3 years

Implementation costs (i.e., one-time costs of between \$40,000,000 and \$90,000,000, and annual costs of \$10,000,000) and staff hours (one-time of 300,000 and annual of 40,000) after the planning effort reflect a range consistent with projects of a similar scope undertaken by other large public sector agencies. Some examples (with attendant scopes) appear below:

State of Arizona (employees: 50,000; Lawson HR/payroll/benefits software): \$34M; State of Michigan (payroll software): \$47M; State of Missouri (payroll software): \$13M; State of Delaware (payroll): \$30M - project abandoned; State of Pennsylvania: \$250M; King County, WA (employees: 13,395; financials/HR/payroll/reporting): \$35M, 170,000 staff hours (project abandoned after additional \$30M needed to complete was denied).

**STRATEGIC  
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 PLAN**

Appendix A:  
 Project  
 Descriptions



**I – Plan Integrated Email and Calendaring Approach**

<b>One Time Costs</b>	<b>Lower: \$0</b>	<b>Project Start:</b>	<b>1<sup>st</sup> Qtr. 2003</b>
	<b>Upper: \$100,000</b>	<b>Project Duration:</b>	<b>6 months</b>

**Associated Findings:**

Alaska's email and calendaring software use is inconsistent across the State. Several different messaging systems (e.g., Microsoft Exchange, Novell GroupWise) are in place in the various departments, in addition to the system offered by ITG. Several different email and calendar clients are in use as well (e.g., FirstClass, Outlook, GroupWise). As a result, there is not a single source for scheduling resources across departments. While the current State standard provides both email and calendar functions, this solution lacks integration between these two core functions. Users in departments that utilize integrated packages (e.g., Outlook) are more sophisticated users of this software than others at the State.

**Impacts:**

Users of the State-provided email and calendaring system miss opportunities for efficiencies that an integrated system would provide.

**Recommended Project:**

This project creates a plan for the State to provide an integrated email/calendaring solution to the departments. Initially this will consist of evaluating potential vendors and solutions, beginning with Sun's iPlanet products, which are the "descendants" of the State's Netscape email and calendar applications. If the solution is found to be lacking, the project recommends looking at other integrated products (e.g., Microsoft Exchange, etc.). This project also includes the research and preliminary design work necessary to carry out the actual implementation of the system in the future.

**Benefits:**

- ◆ Positions the State to improve email/calendaring functionality
- ◆ Fosters enhanced communication statewide

**Cost Assumptions:**

The lower end of the cost range assumes that the project is completed utilizing only State resources. The upper estimate assumes that the research and design work is performed by a consultant at a rate of \$150 per hour.

<b>Long-term Implementation Costs:</b>	Lower: \$1,876,000	Implementation Staff Hours:	12,387
	Upper: \$8,737,000	Recurring Staff Hours:	TBD
	Annual: \$181,000	Duration:	Ongoing

To prepare estimates for the costs of actually implementing the future system, Pacific Technologies leveraged data available for an implementation of Microsoft Exchange and Outlook, for 10,000 mailboxes over 50 locations. The deployment assumes a total of ten Windows 2000 servers and ten Exchange 2000 servers, including ten new servers at \$18,000 each. Consultant hours are priced at \$150, and a total of 46,000 hours are estimated. \$205,000 is included for travel and expenses. Server software (Windows 2000 and Exchange 2000) licenses are costed at \$2,000 each. Client licenses for each user are priced at \$40. 2,000 hours of externally provided project management are included at \$150/hour. Training is also included for both end users (using a "train-the-trainer" approach) and service providers, at a total cost of \$77/user.

**STRATEGIC  
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**J – Develop State-wide IT Security Plan**

<b>One Time Costs</b>	<b>Lower: \$12,000</b>	<b>Project Start:</b>	<b>4<sup>th</sup> Qtr. 2002</b>
	<b>Upper: \$51,000</b>	<b>Project Duration:</b>	<b>9 months</b>

**Associated Findings:**

The State has historically approached information technology security in a largely uncoordinated manner. Until recently, no State-wide effort has been made to develop a comprehensive plan to articulate policies and procedures regarding Alaska's data assets. A draft security plan is currently under review.

**Impacts:**

Lack of a coordinated approach to security leaves the State and its agencies vulnerable to intrusion and other malicious activities.

**Recommended Project:**

This project completes the effort already underway to compose a structured approach to State IT security. The IT security plan will not only articulate guidelines, but also will provide a "blueprint" for how the State will put policies into place and enforce them. It will also address roles, responsibilities, and actions to be taken in the event that the State's network and data are compromised by a malicious intrusion.

**Benefits:**

- ◆ Protects the State's valuable information technology assets
- ◆ Addresses heightened concerns regarding homeland security

**Cost Assumptions:**

The lower end cost estimate assumes that the plan is completed by State staff, and includes \$12,000 for review and recommendations by an IT security consultant (80 hours at \$150/hour). The upper estimate assumes that the plan is developed completely by the consultant, and includes 340 hours to do this work.

<b>Long-term Implementation Costs:</b>	Lower: \$110,000	Implementation Staff Hours:	500
	Upper: \$225,000	Recurring Staff Hours:	500
	Annual: \$90,000	Duration:	Ongoing

To implement the plan, low end one-time costs include \$5,000 for staff training, \$100,000 for hardware, and \$5,000 for consulting assistance. Upper-end costs assume \$15,000 for training, \$200,000 for hardware, and \$10,000 for consulting. Annual costs are estimated to be \$90,000, and include an annual State-wide security audit at \$50,000, and hardware maintenance costs of \$40,000 (20% of purchase price). One-time staff hours and recurring staff hours are both estimated at 500 per year.



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**K – Develop State-wide IT Disaster Recovery Plan**

<b>One Time Costs</b>	<b>Lower: \$120,000</b>	<b>Project Start:</b>	<b>4<sup>th</sup> Qtr. 2003</b>
	<b>Upper: \$240,000</b>	<b>Project Duration:</b>	<b>12 months</b>

**Associated Findings:**

The State lacks a detailed, tested disaster recovery plan for information technology.

**Impacts:**

Lacking a disaster recovery plan, the State cannot confidently assure its citizens that it will be able to provide services in a reasonable time frame following a substantial disaster.

**Recommended Project:**

This project creates a plan for disaster recovery from an IT perspective. In this plan, the key business processes are matched against the IT system, and an appropriate speed of recovery strategy is chosen. This may require some in-depth research to determine the relevant costs of each strategy. Consideration should also be given to the impact of potential severe damage to both premises and communication systems which could have a significant impact on the organization's IT services and systems. Ultimately, this plan details which option(s) (e.g., fully mirrored recovery site, switchable hot site, hot site, cold site, etc.) is (are) most appropriate in the event of such an emergency. The plan also lays out roles and responsibilities for disaster recovery and a projected schedule for testing the plan.

**Benefits:**

Prepares the State to re-deploy information technology resources following a catastrophic incident.

**Cost Assumptions:**

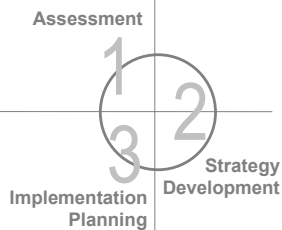
The lower end of the cost range (\$120K) assumes that the State hires a consultant for 800 hours at \$150/hr to prepare the disaster recovery plan. The upper end of the cost range (\$240K) assumes that the consultant requires 1600 hours at \$150/hr.

<b>Long-term Implementation Costs:</b>	Lower: \$325,000	Implementation Staff Hours:	520
	Upper: \$500,000	Recurring Staff Hours:	0
	Annual: \$500,000	Duration:	Ongoing

For the purpose of actually implementing the disaster recover plan, the State is assumed to enter into an agreement with a company to provide a hot site for mission critical applications. This represents the “middle of the road” for the State regarding what might be recommended by the plan. The City of Seattle uses Sungard for this purpose, spending approximately \$250,000 annually. Given the complexity of the State's requirements, the cost is assumed to be anywhere from 30% to 100% above this value – \$325,000 and \$500,000, respectively. Recurring costs would be the same as the high end, as the contract entered into by the State is assumed to continue at the same level year to year.

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**L – Conduct Mainframe Impact Analysis**

<b>One Time Costs</b>	<b>Lower: \$161,000</b>	<b>Project Start (1<sup>st</sup> phase):</b>	<b>2<sup>nd</sup> Qtr. 2003</b>
	<b>Upper: \$266,000</b>	<b>Project Duration:</b>	<b>6 months</b>

**Associated Findings:**

- ◆ No clear direction for the future of the mainframe has been charted
- ◆ Critical legacy skill sets are leaving the State's workforce as IT staff retire – especially older programming languages

**Impacts:**

- ◆ The retirement of IT staff who maintain legacy applications and the inability to replace their skills, creates uncertainty around the future of applications housed on the mainframe
- ◆ Without appropriate action, the State may realize a scenario in which it cannot support its application portfolio effectively

**Recommended Project:**

Following the implementation of the State's financial and human resources systems, utilization of the mainframe is likely to be substantially reduced. This project determines the future of systems that remain on the mainframe at that point in time. Following that determination, the analysis will provide estimates of staff required to support remaining systems, and the financial impact on the departments requiring systems that remain on the mainframe. The ultimate result of the analysis will be clear direction as to whether the State will migrate the remaining systems off the mainframe, or continue to maintain and upgrade them. With the future of the mainframe determined by the impact analysis, this project implements the agreed-upon course of action. This project also incorporates a staffing transition component to determine future requirements and guidance regarding how to meet these requirements.

**Benefits:**

- ◆ Clarifies the options and ramifications of the various scenarios involving the State's mainframe resources
- ◆ Articulates an agreed-upon direction for the State's core computing platform

**Cost Assumptions:**

The lower end of the cost range represents consultant effort required to perform the analysis – roughly 1200 hours at \$150/hour. The upper end of the cost range assumes the consultant requires roughly 1800 hours to perform the analysis.

<b>Long-term Implementation Costs:</b>	Lower: \$30,000,000	Implementation Staff Hours:	156,000
	Upper: \$40,000,000	Recurring Staff Hours:	TBD
	Annual: \$3,000	Duration:	5 years

The results of the analysis will dictate the cost of its implementation. Recently King County, WA performed an analysis regarding the future of their mainframe computing environment. Using King County as a proxy, the options analyzed (migrate off, invest additional funds in mainframe, etc.) ranged in cost from \$35 million to \$40 million. Based on this, our estimate for the State of Alaska ranges from \$30 to \$40 million. Recurring costs (again based on King County) total \$3 million annually. Labor resources required during the mainframe upgrade or migration total 15 FTEs (again based on the King County analysis).



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## STRATEGIC INFORMATION TECHNOLOGY PLAN

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### M – Conduct IT Job Classification Study

One Time Costs	Lower: \$161,000	Project Start:	2 <sup>nd</sup> Qtr 2004
	Upper: \$281,000	Project Duration:	12 months

#### Associated Findings:

- ◆ Many staff perform duties outside their job descriptions
- ◆ Reclassification is difficult
- ◆ New classification, when possible, is time consuming
- ◆ Perception exists that many classifications are under-compensated

#### Impacts:

Compensation and classification issues may exacerbate the difficulty in attracting and retaining IT staff.

#### Recommended Project:

This project examines the job categories currently in use by the State for IT job functions. Following a review of existing categories, the State will develop new classifications (if necessary) that fit the IT functions more appropriately than those currently in place. Compensation will also be evaluated to determine the competitiveness of the State's rates. Note that this does not necessarily mean that salaries for IT staff will be increased or decreased. The result of this project may be so-called "broad banding" of job titles, or a more discrete approach. A project such as this would require the involvement of the Division of Personnel and would need to be scheduled and prioritized along with any other classification studies that the State is considering.

#### Benefits:

- ◆ Ensures staff are appropriately classed and compensated
- ◆ Improves the recruiting process

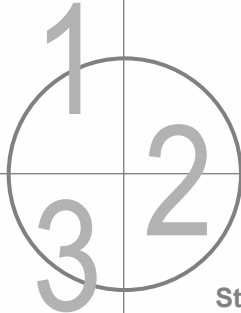
#### Cost Assumptions:

The lower end of the cost range represents consultant effort to perform the analysis – roughly 1200 hours at \$150/hour. The upper end of the costs range assumes the consultant requires roughly 1900 hours to perform the work.

Long-term Implementation Costs:	Lower: \$0	Implementation Staff Hours:	0
	Upper: \$2,144,000	Recurring Staff Hours:	0
	Annual: \$2,144,000	Duration:	None

The subsequent effort of actually reclassifying staff assumes, on the lower end, no incremental increase in salaries. The upper-end costs (and the recurring costs) assume that on average, salaries are increased by 5%.

Assessment



Strategy  
Development

Implementation  
Planning

# [ IT staffing data and definitions

# IT Staffing Data

## APPENDIX

# B

- ◆ During the assessment phase, Pacific Technologies performed a quantitative evaluation of the level and allocation of IT labor at the State
- ◆ Data was collected by the agencies and departments:
  - We provided a matrix to capture the levels of IT effort as a percentage of a full time equivalent (FTE), applied to 27 different IT activities (activity definitions are provided beginning on page B-18)
  - Activities are categorized into the following functional areas: Customer Services, System Services, Business Application Services, IT Planning, and IT Administration
- ◆ This appendix presents summaries of the data received from the departments presented to the right, along with attendant findings, regarding:
  - Overall staffing levels (i.e., IT staffing as a percentage of total staffing at the State)
  - Overall allocation of effort to functional areas
  - PC to PC-support-staff ratio
  - Use of shadow staff
  - “Cooks”<sup>1</sup>

### *Data was provided by the following:*

- ◆ Dept. of Administration (DOA)
- ◆ Dept. of Community and Economic Development (DCED)
- ◆ Dept. of Education and Early Development
- ◆ Dept. of Environmental Conservation
- ◆ Dept. of Fish and Game
- ◆ Governor’s Office
- ◆ Dept. of Health and Human Services
- ◆ Dept. of Labor and Workforce Development
- ◆ Dept. of Law
- ◆ Legislature
- ◆ Dept. of Military and Veteran’s Affairs
- ◆ Dept. of Natural Resources
- ◆ Permanent Fund Corporation
- ◆ Dept. of Public Safety
- ◆ Dept. of Revenue
- ◆ Dept. of Transportation and Public Facilities

# IT Staffing Data: Dept. of Administration

## APPENDIX

## B

- ◆ Overall IT staffing levels are below the typical benchmark of 3% – 5%, especially when shadow staff are removed
- ◆ Workstation-to-PC support staff ratio is above typical benchmark of 100 – 150:1
- ◆ Heavy reliance on shadow staff
- ◆ “Too many cooks” in:
  - Security administration
  - Standards/policies development
  - High numbers of “cooks” in other areas are mitigated by the highly distributed nature of the DOA

Alaska Dept of Administration O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	2.85	0.28	2.68	5.81	
Help Desk (Tier 1)	0.60	0.01	0.88	1.49	32
Desktop PC support (Tier 2)	1.28	0.01	0.49	1.78	23
Business application support	0.48	0.12	0.58	1.17	24
Training	0.49	0.14	0.74	1.37	39
System Services	2.87	1.39	0.85	5.10	
Network connectivity (WAN/LAN)	0.72	-	-	0.72	14
Server administration	1.28	0.11	0.01	1.40	20
Data center operations	0.13	0.01	-	0.14	9
Database administration	0.23	1.10	0.25	1.58	16
Security administration	0.30	0.17	0.51	0.97	28
Telephone systems support	-	-	0.08	0.08	1
Mobile computing support	0.21	-	-	0.21	12
Business Application Services	8.57	2.72	3.00	14.29	
Application development	2.25	1.64	0.33	4.21	38
Small application support	0.94	0.02	0.59	1.55	33
Internet/intranet support	0.94	0.20	0.40	1.54	33
Requirements analysis	0.73	0.27	0.43	1.43	42
Custom application maintenance	2.96	0.55	0.65	4.16	33
Package application maintenance	0.75	0.05	0.60	1.40	27
IT Planning	2.26	0.07	0.91	3.24	
Strategic planning	0.66	0.03	0.42	1.11	25
Research and development	1.07	0.02	0.12	1.21	20
Disaster recovery planning	0.27	0.02	-	0.29	13
Governance coordination	0.26	-	0.37	0.63	16
IT Administration	2.45	-	3.69	6.14	
Asset management	0.23	-	0.18	0.41	16
IT procurement	0.27	-	0.26	0.52	19
Project management	0.85	-	0.89	1.74	25
Standards and policies development	0.37	-	1.22	1.59	26
Administrative support	0.68	-	0.50	1.18	25
Departmental management	0.05	-	0.65	0.70	7
<b>FTE TOTAL</b>	<b>19.00</b>	<b>4.45</b>	<b>11.12</b>	<b>34.57</b>	
<b>FTE as % of TTL IT FTE</b>	<b>55%</b>	<b>13%</b>	<b>32%</b>		

PC Support Ratio	
PCs	1,097
PC Support FTEs	3.27
<b>RATIO</b>	<b>336</b>

Server Support Ratio	
Servers	89
Server Admin FTEs	1.40
<b>RATIO</b>	<b>64</b>

Distribution of Effort	
Customer Services	17%
System Services	15%
Application Services	41%
IT Planning	9%
IT Administration	18%

Overall Staffing Levels	
Total FTEs	1,550
IT FTEs	34.57
<b>Ratio</b>	<b>2.23%</b>
<b>without shadow staff</b>	<b>1.51%</b>

Costs	
Average Unit Cost	\$ 73,099
Total Labor Cost	\$ 2,527,113

# IT Staffing Data:

Dept. of Administration: ITG

## APPENDIX B

- ◆ The table to the right presents the allocation of staff effort within the ITG
- ◆ No benchmarks are presented with these figures, as the ITG performs support for other departments, and not exclusively for the Department of Administration

Alaska Information Technology Group Staffing Effort Allocation	
FTE Totals	ITG Staff
Customer Services	8.75
Help Desk (Tier 1)	8.75
Desktop PC support (Tier 2)	-
Business application support	-
Training	-
System Services	72.00
Network connectivity (WAN/LAN)	29.25
Server administration	13.25
Data center operations	12.75
Database administration	4.75
Security administration	1.00
Telephone systems support	10.00
Mobile computing support	1.00
Business Application Services	6.50
Application development	2.00
Small application support	0.50
Internet/intranet support	1.00
Requirements analysis	0.75
Custom application maintenance	1.00
Package application maintenance	1.25
IT Planning	1.05
Strategic planning	0.50
Research and development	-
Disaster recovery/planning	0.20
Governance coordination	0.35
IT Administration	22.70
Asset management	-
IT procurement	3.00
Project management	2.75
Standards and policies development	1.00
Administrative support	11.75
Departmental management	4.20
<b>FTE TOTAL</b>	<b>111.00</b>

# IT Staffing Data: Dept. of Community & Economic Development

## APPENDIX B

- ◆ Overall IT staffing levels are just above the typical benchmark of 3% – 5%
- ◆ Workstation-to-PC support staff ratio is within the typical benchmark of 100 – 150:1
- ◆ “Too many cooks” in:
  - Security administration
  - Asset management
  - Disaster recovery planning

Dept of Community & Economic Development O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	5.36	0.02	0.85	6.23	
Help Desk (Tier 1)	1.57	0.01	0.15	1.73	16
Desktop PC support (Tier 2)	1.85	0.01	0.05	1.91	14
Business application support	0.87	0.01	0.55	1.43	16
Training	1.07	-	0.10	1.17	18
System Services	3.47	-	0.47	3.94	
Network connectivity (WAN/LAN)	0.55	-	0.10	0.65	12
Server administration	1.57	-	-	1.57	12
Data center operations	0.01	-	-	0.01	1
Database administration	0.64	-	0.20	0.84	7
Security administration	0.53	-	-	0.53	10
Telephone systems support	0.16	-	0.17	0.33	6
Mobile computing support	0.01	-	-	0.01	1
Business Application Services	10.74	0.01	1.85	12.60	
Application development	5.25	-	0.10	5.35	17
Small application support	0.36	0.01	0.05	0.42	6
Internet/intranet support	0.67	-	1.69	2.36	8
Requirements analysis	1.90	-	0.01	1.91	16
Custom application maintenance	2.50	-	-	2.50	11
Package application maintenance	0.06	-	-	0.06	2
IT Planning	1.31	-	0.04	1.35	
Strategic planning	0.34	-	0.03	0.37	6
Research and development	0.35	-	-	0.35	4
Disaster recovery planning	0.55	-	0.01	0.56	10
Governance coordination	0.07	-	-	0.07	1
IT Administration	1.87	-	0.95	2.82	
Asset management	0.46	-	0.32	0.78	11
IT procurement	0.17	-	0.22	0.39	8
Project management	0.40	-	-	0.40	4
Standards and policies development	0.34	-	0.07	0.41	8
Administrative support	0.17	-	0.32	0.49	6
Departmental management	0.33	-	0.02	0.35	5
<b>FTE TOTAL</b>	<b>22.75</b>	<b>0.03</b>	<b>4.16</b>	<b>26.93</b>	
<b>FTE as % of TTL IT FTE</b>	<b>84%</b>	<b>0.1%</b>	<b>15%</b>		

PC Support Ratio	
PCs	439
PC Support FTEs	3.63
<b>RATIO</b>	<b>121:1</b>

Server Support Ratio	
Servers	35
Server Admin FTEs	1.57
<b>RATIO</b>	<b>22:1</b>

Distribution of Effort	
Customer Services	23%
System Services	15%
Application Services	47%
IT Planning	5%
IT Administration	10%

Overall Staffing Levels	
<b>Total FTEs</b>	<b>465</b>
<b>IT FTEs</b>	<b>26.93</b>
<b>Ratio</b>	<b>5.79%</b>
<b>without shadow staff</b>	<b>4.90%</b>

Costs	
Average Unit Cost	\$ 65,788
Total Labor Cost	\$ 1,771,934



# IT Staffing Data: Dept. of Education & Early Development

## APPENDIX

B

- Overall IT staffing levels fall within the typical benchmark of 3% – 5%
- Workstation-to-PC support staff ratio is well below the typical benchmark of 100 – 150:1
- Staff appear to be well-allocated across customer services, system services, business application services, IT planning, and IT administration

Alaska Dept of Education & Early Development O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	10.97	-	-	10.97	
Help Desk (Tier 1)	4.35	-	-	4.35	11
Desktop PC support (Tier 2)	1.83	-	-	1.83	10
Business application support	3.95	-	-	3.95	14
Training	0.84	-	-	0.84	8
System Services	2.86	-	-	2.86	
Network connectivity (WAN/LAN)	0.72	-	-	0.72	9
Server administration	0.59	-	-	0.59	9
Data center operations	-	-	-	-	-
Database administration	0.85	-	-	0.85	5
Security administration	0.58	-	-	0.58	7
Telephone systems support	0.05	-	-	0.05	1
Mobile computing support	0.07	-	-	0.07	2
Business Application Services	9.95	-	-	9.95	
Application development	2.95	-	-	2.95	8
Small application support	0.42	-	-	0.42	5
Internet/intranet support	2.50	-	-	2.50	10
Requirements analysis	0.89	-	-	0.89	7
Custom application maintenance	1.20	-	-	1.20	7
Package application maintenance	1.99	-	-	1.99	9
IT Planning	1.55	-	-	1.55	
Strategic planning	0.85	-	-	0.85	6
Research and development	0.13	-	-	0.13	2
Disaster recovery planning	0.47	-	-	0.47	8
Governance coordination	0.10	-	-	0.10	1
IT Administration	2.63	-	-	2.63	
Asset management	0.17	-	-	0.17	4
IT procurement	0.61	-	-	0.61	7
Project management	0.60	-	-	0.60	7
Standards and policies development	0.14	-	-	0.14	3
Administrative support	0.31	-	-	0.31	5
Departmental management	0.80	-	-	0.80	3
<b>FTE TOTAL</b>	<b>27.96</b>	<b>-</b>	<b>-</b>	<b>27.96</b>	
<b>FTE as % of TTL IT FTE</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>		

PC Support Ratio	
PCs	396
PC Support FTEs	6.18
<b>RATIO</b>	<b>64:1</b>

Server Support Ratio	
Servers	14
Server Admin FTEs	0.59
<b>RATIO</b>	<b>24:1</b>

Distribution of Effort	
Customer Services	39%
System Services	10%
Application Services	36%
IT Planning	6%
IT Administration	9%

Overall Staffing Levels	
<b>Total FTEs</b>	<b>587</b>
<b>IT FTEs</b>	<b>27.96</b>
<b>Ratio</b>	<b>4.76%</b>
<b>without shadow staff</b>	<b>4.76%</b>

Costs	
Average Unit Cost	\$ 66,777
Total Labor Cost	\$ 1,867,096

# IT Staffing Data:

## Dept. of Environmental Conservation

### APPENDIX B

- Overall IT staffing levels are just above typical benchmark of 3% – 5%
- Workstation-to-PC support staff ratio is well above the typical benchmark of 100 – 150:1
- Heavy reliance on shadow staff, especially in Internet/intranet support
- “Too many cooks” in:
  - Database administration
  - Internet/intranet support

Alaska Dept of Environmental Conservation O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	2.65	-	0.36	3.01	
Help Desk (Tier 1)	0.56	-	0.02	0.58	8
Desktop PC support (Tier 2)	0.89	-	0.05	0.94	8
Business application support	0.87	-	0.19	1.06	11
Training	0.33	-	0.10	0.43	10
System Services	2.97	-	1.10	4.07	
Network connectivity (WAN/LAN)	0.25	-	0.02	0.27	6
Server administration	0.41	-	0.01	0.42	7
Data center operations	-	-	-	-	-
Database administration	1.85	-	1.07	2.92	19
Security administration	0.21	-	-	0.21	5
Telephone systems support	-	-	-	-	-
Mobile computing support	0.25	-	-	0.25	5
Business Application Services	7.07	1.03	3.63	11.73	
Application development	4.28	1.03	0.85	6.16	23
Small application support	0.40	-	0.15	0.55	4
Internet/intranet support	0.39	-	2.04	2.43	15
Requirements analysis	1.40	-	0.31	1.71	16
Custom application maintenance	0.35	-	0.25	0.60	8
Package application maintenance	0.25	-	0.03	0.28	6
IT Planning	1.15	-	0.40	1.55	
Strategic planning	0.50	-	0.19	0.69	9
Research and development	0.45	-	0.01	0.46	9
Disaster recovery planning	0.20	-	0.05	0.25	5
Governance coordination	-	-	0.15	0.15	1
IT Administration	2.16	-	0.66	2.82	
Asset management	0.05	-	0.12	0.17	3
IT procurement	-	-	0.02	0.02	1
Project management	1.68	-	0.37	2.05	15
Standards and policies development	0.18	-	0.10	0.28	4
Administrative support	0.05	-	-	0.05	1
Departmental management	0.20	-	0.05	0.25	2
<b>FTE TOTAL</b>	<b>16.00</b>	<b>1.03</b>	<b>6.15</b>	<b>23.17</b>	
<b>FTE as % of TTL IT FTE</b>	<b>69%</b>	<b>4%</b>	<b>27%</b>		

PC Support Ratio	
PCs	547
PC Support FTEs	1.52
<b>RATIO</b>	<b>361:1</b>

Server Support Ratio	
Servers	30
Server Admin FTEs	0.42
<b>RATIO</b>	<b>71:1</b>

Distribution of Effort	
Customer Services	13%
System Services	18%
Application Services	51%
IT Planning	7%
IT Administration	12%

Overall Staffing Levels	
Total FTEs	460
IT FTEs	23.17
<b>Ratio</b>	<b>5.04%</b>
<b>without shadow staff</b>	<b>3.70%</b>

Costs	
Average Unit Cost	\$ 74,622
Total Labor Cost	\$ 1,728,996

# IT Staffing Data: Dept. of Fish & Game

## APPENDIX

## B

- ◆ Overall IT staffing levels are within the typical benchmark of 3% – 5%
- ◆ Workstation-to-PC support staff ratio is within the typical benchmark of 100 – 150:1
- ◆ “Too many cooks” in:
  - Departmental management
  - “Cooks” concerns in other areas are mitigated by the highly distributed nature of IT at Fish and Game

Alaska Dept of Fish & Game O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	12.23	-	0.11	12.34	
Help Desk (Tier 1)	1.83	-	0.03	1.86	14
Desktop PC support (Tier 2)	5.90	-	0.03	5.92	28
Business application support	2.65	-	0.06	2.71	22
Training	1.86	-	-	1.86	15
System Services	5.79	-	1.14	6.93	
Network connectivity (WAN/LAN)	1.27	-	-	1.27	13
Server administration	1.82	-	-	1.82	17
Data center operations	0.16	-	-	0.16	2
Database administration	2.11	-	1.14	3.25	16
Security administration	0.32	-	-	0.32	7
Telephone systems support	0.02	-	-	0.02	1
Mobile computing support	0.10	-	-	0.10	1
Business Application Services	27.71	-	0.81	28.52	
Application development	14.11	-	0.50	14.61	38
Small application support	1.65	-	0.05	1.70	17
Internet/intranet support	2.66	-	0.05	2.71	20
Requirements analysis	2.04	-	0.19	2.23	21
Custom application maintenance	6.46	-	0.02	6.48	18
Package application maintenance	0.79	-	-	0.79	5
IT Planning	1.29	-	0.40	1.69	
Strategic planning	0.65	-	0.15	0.80	13
Research and development	0.49	-	0.05	0.54	11
Disaster recovery planning	0.15	-	-	0.15	5
Governance coordination	-	-	0.20	0.20	1
IT Administration	4.89	-	0.56	5.44	
Asset management	0.15	-	0.05	0.20	5
IT procurement	0.74	-	0.08	0.82	19
Project management	3.20	-	0.15	3.35	25
Standards and policies development	0.42	-	0.06	0.48	13
Administrative support	0.28	-	0.15	0.43	5
Departmental management	0.10	-	0.08	0.18	6
<b>FTE TOTAL</b>	<b>51.90</b>	<b>-</b>	<b>3.01</b>	<b>54.91</b>	
<b>FTE as % of TTL IT FTE</b>	<b>95%</b>	<b>0%</b>	<b>5%</b>		

PC Support Ratio	
PCs	1,136
PC Support FTEs	7.78
<b>RATIO</b>	<b>146:1</b>

Server Support Ratio	
Servers	94
Server Admin FTEs	1.82
<b>RATIO</b>	<b>52:1</b>

Distribution of Effort	
Customer Services	22%
System Services	13%
Application Services	52%
IT Planning	3%
IT Administration	10%

Overall Staffing Levels	
Total FTEs	1,460
IT FTEs	54.91
<b>Ratio</b>	<b>3.76%</b>
<b>without shadow staff</b>	<b>3.55%</b>

Costs	
Average Unit Cost	\$ 69,880
Total Labor Cost	\$ 3,837,110

# IT Staffing Data: Governor's Office

## APPENDIX

B

- Overall IT staffing levels are marginally below the typical benchmark of 3% – 5%
- Workstation-to-PC support staff ratio is just above the typical benchmark of 100 – 150:1
- IT staff appear well allocated across customer services, system services, business application services, IT planning, and IT administration

Alaska Office of the Governor O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	1.53	-	-	1.53	
Help Desk (Tier 1)	0.35	-	-	0.35	4
Desktop PC support (Tier 2)	1.05	-	-	1.05	4
Business application support	0.11	-	-	0.11	4
Training	0.02	-	-	0.02	2
System Services	0.92	-	-	0.92	
Network connectivity (WAN/LAN)	0.20	-	-	0.20	2
Server administration	0.20	-	-	0.20	2
Data center operations	0.20	-	-	0.20	2
Database administration	0.25	-	-	0.25	3
Security administration	-	-	-	-	-
Telephone systems support	-	-	-	-	-
Mobile computing support	0.07	-	-	0.07	3
Business Application Services	2.64	-	-	2.64	
Application development	-	-	-	-	-
Small application support	0.18	-	-	0.18	5
Internet/intranet support	0.18	-	-	0.18	5
Requirements analysis	0.29	-	-	0.29	4
Custom application maintenance	1.78	-	-	1.78	6
Package application maintenance	0.21	-	-	0.21	4
IT Planning	0.21	-	-	0.21	
Strategic planning	0.06	-	-	0.06	2
Research and development	0.15	-	-	0.15	2
Disaster recovery planning	-	-	-	-	-
Governance coordination	-	-	-	-	-
IT Administration	0.70	-	-	0.70	
Asset management	0.20	-	-	0.20	1
IT procurement	0.10	-	-	0.10	1
Project management	0.10	-	-	0.10	1
Standards and policies development	0.10	-	-	0.10	1
Administrative support	0.10	-	-	0.10	1
Departmental management	0.10	-	-	0.10	1
<b>FTE TOTAL</b>	<b>6.00</b>	<b>-</b>	<b>-</b>	<b>6.00</b>	
<b>FTE as % of TTL IT FTE</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>		

PC Support Ratio	
PCs	211
PC Support FTEs	1.40
<b>RATIO</b>	<b>151:1</b>

Server Support Ratio	
Servers	19
Server Admin FTEs	0.20
<b>RATIO</b>	<b>95:1</b>

Distribution of Effort	
Customer Services	26%
System Services	15%
Application Services	44%
IT Planning	4%
IT Administration	12%

Overall Staffing Levels	
Total FTEs	227
IT FTEs	6.00
<b>Ratio</b>	<b>2.64%</b>
<b>without shadow staff</b>	<b>2.64%</b>

Costs	
Average Unit Cost	\$ 75,231
Total Labor Cost	\$ 451,386

# IT Staffing Data: Dept. of Health & Social Services

## APPENDIX B

- ◆ Overall IT staffing levels are within the typical benchmark of 3% – 5%
- ◆ Workstation-to-PC support staff ratio is within the typical benchmark of 100 – 150:1
- ◆ Reliance on shadow staff somewhat high
- ◆ “Too many cooks” in:
  - Customer services
  - Security administration
  - Standards/policies development
  - Departmental management
  - Asset management
  - “Cooks” concerns in other areas are mitigated by the highly distributed nature of DHSS IT services

Alaska Dept of Health & Social Services O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	28.36	0.35	1.30	30.01	
Help Desk (Tier 1)	9.79	0.05	0.90	10.74	69
Desktop PC support (Tier 2)	8.73	0.20	0.15	9.08	59
Business application support	6.52	0.05	0.14	6.71	49
Training	3.34	0.05	0.11	3.50	49
System Services	19.51	0.35	1.10	20.96	
Network connectivity (WAN/LAN)	4.02	0.05	0.02	4.09	42
Server administration	6.21	0.05	0.17	6.43	51
Data center operations	0.73	0.05	0.30	1.08	15
Database administration	5.57	0.10	0.54	6.20	49
Security administration	2.00	0.05	0.07	2.12	34
Telephone systems support	0.58	-	-	0.58	6
Mobile computing support	0.43	0.05	-	0.48	14
Business Application Services	28.39	1.20	2.77	32.36	
Application development	8.68	0.95	1.15	10.78	47
Small application support	5.34	0.05	0.10	5.49	46
Internet/intranet support	2.24	0.05	1.22	3.51	31
Requirements analysis	3.58	0.10	0.10	3.78	35
Custom application maintenance	6.83	0.05	0.20	7.08	41
Package application maintenance	1.73	-	-	1.73	19
IT Planning	8.55	0.05	1.95	10.55	
Strategic planning	2.74	-	0.65	3.39	35
Research and development	4.01	-	1.15	5.16	59
Disaster recovery planning	0.92	0.05	0.05	1.02	21
Governance coordination	0.88	-	0.10	0.98	10
IT Administration	9.91	0.10	10.66	20.67	
Asset management	1.50	0.05	0.08	1.63	31
IT procurement	1.24	0.05	0.73	2.02	32
Project management	2.83	-	5.40	8.23	35
Standards and policies development	1.12	-	2.85	3.97	25
Administrative support	1.45	-	1.00	2.45	29
Departmental management	1.79	-	0.60	2.39	14
<b>FTE TOTAL</b>	<b>94.72</b>	<b>2.05</b>	<b>17.78</b>	<b>114.54</b>	
<b>FTE as % of TTL IT FTE</b>	<b>83%</b>	<b>2%</b>	<b>16%</b>		

PC Support Ratio	
PCs	2,374
PC Support FTEs	19.81
<b>RATIO</b>	<b>120:1</b>

Server Support Ratio	
Servers	195
Server Admin FTEs	6.43
<b>RATIO</b>	<b>30:1</b>

Distribution of Effort	
Customer Services	26%
System Services	18%
Application Services	28%
IT Planning	9%
IT Administration	18%

Overall Staffing Levels	
Total FTEs	2,346
IT FTEs	114.54
<b>Ratio</b>	<b>4.88%</b>
<b>without shadow staff</b>	<b>4.12%</b>

Costs	
Average Unit Cost	\$ 67,712
Total Labor Cost	\$ 7,755,961

# IT Staffing Data: Dept. of Labor & Workforce Development

## APPENDIX

## B

- Overall IT staffing levels are above the typical benchmark of 3% – 5% — this is likely driven by the DOL's reliance on custom applications
- Workstation-to-PC support staff ratio is above the typical benchmark of 100 – 150:1
- Heavy reliance on shadow staff, especially in application development

Alaska Dept of Labor & Workforce Development O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	10.29	-	1.07	11.36	
Help Desk (Tier 1)	0.81	-	-	0.81	11
Desktop PC support (Tier 2)	5.81	-	0.12	5.93	15
Business application support	1.42	-	0.25	1.67	15
Training	2.25	-	0.70	2.95	23
System Services	9.58	-	-	9.58	
Network connectivity (WAN/LAN)	1.57	-	-	1.57	15
Server administration	1.96	-	-	1.96	12
Data center operations	3.03	-	-	3.03	6
Database administration	2.09	-	-	2.09	12
Security administration	0.83	-	-	0.83	6
Telephone systems support	-	-	-	-	-
Mobile computing support	0.10	-	-	0.10	1
Business Application Services	28.95	-	11.63	40.58	
Application development	6.37	-	4.80	11.17	39
Small application support	4.87	-	0.73	5.60	16
Internet/intranet support	1.95	-	1.35	3.30	19
Requirements analysis	5.23	-	2.50	7.73	38
Custom application maintenance	9.68	-	2.10	11.78	36
Package application maintenance	0.85	-	0.15	1.00	9
IT Planning	1.62	-	-	1.62	
Strategic planning	0.55	-	-	0.55	4
Research and development	0.42	-	-	0.42	9
Disaster recovery planning	0.40	-	-	0.40	5
Governance coordination	0.25	-	-	0.25	3
IT Administration	2.36	-	4.15	6.51	
Asset management	0.10	-	-	0.10	2
IT procurement	0.22	-	-	0.22	4
Project management	1.15	-	3.00	4.15	12
Standards and policies development	0.65	-	0.05	0.70	11
Administrative support	-	-	-	-	-
Departmental management	0.24	-	1.10	1.34	6
<b>FTE TOTAL</b>	<b>52.80</b>	<b>-</b>	<b>16.85</b>	<b>69.65</b>	
<b>FTE as % of TTL IT FTE</b>	<b>76%</b>	<b>0%</b>	<b>24%</b>		

PC Support Ratio	
PCs	1,160
PC Support FTEs	6.74
<b>RATIO</b>	<b>172:1</b>

Server Support Ratio	
Servers	195
Server Admin FTEs	1.96
<b>RATIO</b>	<b>99:1</b>

Distribution of Effort	
Customer Services	16%
System Services	14%
Application Services	58%
IT Planning	2%
IT Administration	9%

Overall Staffing Levels	
<b>Total FTEs</b>	<b>854</b>
<b>IT FTEs</b>	<b>69.65</b>
<b>Ratio</b>	<b>8.16%</b>
<b>without shadow staff</b>	<b>6.18%</b>

Costs	
Average Unit Cost	\$ 72,817
Total Labor Cost	\$ 5,071,734

# IT Staffing Data:

## Dept. of Law

### APPENDIX B

- Overall IT staffing levels are below the typical benchmark of 3% – 5%
- Workstation-to-PC support staff ratio is above the typical benchmark of 100 – 150:1
- IT staff appear well allocated across customer services, system services, business application services, IT planning, and IT administration

Alaska Dept of Law O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	3.08	-	0.15	3.23	
Help Desk (Tier 1)	1.68	-	0.10	1.78	7
Desktop PC support (Tier 2)	0.91	-	-	0.91	4
Business application support	0.47	-	-	0.47	6
Training	0.02	-	0.05	0.07	2
System Services	1.30	-	0.15	1.45	
Network connectivity (WAN/LAN)	0.29	-	-	0.29	2
Server administration	0.56	-	-	0.56	4
Data center operations	0.20	-	-	0.20	2
Database administration	0.01	-	0.15	0.16	2
Security administration	0.23	-	-	0.23	3
Telephone systems support	-	-	-	-	-
Mobile computing support	0.01	-	-	0.01	1
Business Application Services	0.72	-	-	0.72	
Application development	0.40	-	-	0.40	1
Small application support	0.12	-	-	0.12	2
Internet/intranet support	0.06	-	-	0.06	1
Requirements analysis	0.04	-	-	0.04	2
Custom application maintenance	0.10	-	-	0.10	1
Package application maintenance	-	-	-	-	-
IT Planning	0.67	-	0.30	0.97	
Strategic planning	0.12	-	-	0.12	1
Research and development	0.35	-	-	0.35	3
Disaster recovery planning	0.15	-	-	0.15	2
Governance coordination	0.05	-	0.30	0.35	2
IT Administration	1.23	-	0.40	1.63	
Asset management	0.23	-	0.10	0.33	7
IT procurement	0.20	-	0.20	0.40	4
Project management	0.03	-	-	0.03	1
Standards and policies development	0.08	-	-	0.08	2
Administrative support	0.29	-	0.05	0.34	3
Departmental management	0.40	-	0.05	0.45	3
<b>FTE TOTAL</b>	<b>7.00</b>	<b>-</b>	<b>1.00</b>	<b>8.00</b>	
<b>FTE as % of TTL IT FTE</b>	<b>88%</b>	<b>0%</b>	<b>13%</b>		

PC Support Ratio	
PCs	535
PC Support FTEs	2.69
<b>RATIO</b>	<b>199:1</b>

Server Support Ratio	
Servers	21
Server Admin FTEs	0.56
<b>RATIO</b>	<b>38:1</b>

Distribution of Effort	
Customer Services	40%
System Services	18%
Application Services	9%
IT Planning	12%
IT Administration	20%

Overall Staffing Levels	
Total FTEs	435
IT FTEs	8.00
<b>Ratio</b>	<b>1.84%</b>
<b>without shadow staff</b>	<b>1.61%</b>

Costs	
Average Unit Cost	\$ 67,644
Total Labor Cost	\$ 541,153



# IT Staffing Data: Legislature

## APPENDIX

## B

- Overall IT staffing levels are above the typical benchmark of 3% – 5%
- Workstation-to-PC support staff ratio is well below the typical benchmark of 100 – 150:1
- “Too many cooks” in:
  - Customer services
  - Security administration
  - Mobile computing support
  - Internet/intranet support

Alaska Legislative Branch O&M IT Staffing					
IT Function	Branch IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	10.63	-	0.28	10.91	
Help Desk (Tier 1)	2.91	-	0.07	2.98	21
Desktop PC support (Tier 2)	3.38	-	0.10	3.48	26
Business application support	2.51	-	0.06	2.57	26
Training	1.83	-	0.05	1.88	26
System Services	4.81	-	0.03	4.84	
Network connectivity (WAN/LAN)	0.72	-	0.01	0.73	15
Server administration	0.81	-	0.01	0.82	11
Data center operations	0.38	-	-	0.38	8
Database administration	0.76	-	-	0.76	11
Security administration	0.39	-	0.01	0.40	10
Telephone systems support	0.20	-	-	0.20	1
Mobile computing support	1.54	-	-	1.54	19
Business Application Services	7.76	-	0.16	7.92	
Application development	1.98	-	-	1.98	13
Small application support	1.27	-	0.04	1.31	13
Internet/intranet support	1.49	-	0.01	1.50	16
Requirements analysis	0.92	-	-	0.92	14
Custom application maintenance	1.44	-	0.05	1.49	14
Package application maintenance	0.66	-	0.06	0.72	14
IT Planning	1.25	-	0.09	1.34	
Strategic planning	0.28	-	0.03	0.31	9
Research and development	0.47	-	0.05	0.52	10
Disaster recovery planning	0.38	-	0.01	0.39	9
Governance coordination	0.12	-	-	0.12	4
IT Administration	3.29	-	0.12	3.41	
Asset management	0.18	-	0.04	0.22	4
IT procurement	0.48	-	-	0.48	11
Project management	1.11	-	-	1.11	9
Standards and policies development	0.18	-	0.03	0.21	7
Administrative support	0.86	-	0.03	0.89	8
Departmental management	0.47	-	0.02	0.49	4
<b>FTE TOTAL</b>	<b>27.75</b>	<b>-</b>	<b>0.68</b>	<b>28.43</b>	
<b>FTE as % of TTL IT FTE</b>	<b>98%</b>	<b>0%</b>	<b>2%</b>		

### PC Support Ratio

PCs	439
PC Support FTEs	6.46
<b>RATIO</b>	<b>68:1</b>

### Server Support Ratio

Servers	50
Server Admin FTEs	0.82
<b>RATIO</b>	<b>61:1</b>

### Distribution of Effort

Customer Services	38%
System Services	17%
Application Services	28%
IT Planning	5%
IT Administration	12%

### Overall Staffing Levels

<b>Total FTEs</b>	<b>450</b>
<b>IT FTEs</b>	<b>28.43</b>
<b>Ratio</b>	<b>6.32%</b>
<b>without shadow staff</b>	<b>6.17%</b>

### Costs

Average Unit Cost	\$ 60,292
Total Labor Cost	\$ 1,713,854



# IT Staffing Data: Dept. of Military & Veteran's Affairs

## APPENDIX

## B

- Overall IT staffing levels are below the typical benchmark of 3% – 5%
- Workstation-to-PC support staff ratio is above the typical benchmark of 100 – 150:1
- IT staff appear well allocated across customer services, system services, business application services, IT planning, and IT administration

Alaska Dept of Military & Veteran's Affairs O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	2.45	-	-	2.45	
Help Desk (Tier 1)	0.85	-	-	0.85	7
Desktop PC support (Tier 2)	1.00	-	-	1.00	6
Business application support	0.28	-	-	0.28	7
Training	0.32	-	-	0.32	6
System Services	2.14	-	0.50	2.64	
Network connectivity (WAN/LAN)	0.30	-	-	0.30	6
Server administration	0.52	-	-	0.52	7
Data center operations	-	-	-	-	-
Database administration	0.38	-	0.50	0.88	4
Security administration	0.17	-	-	0.17	6
Telephone systems support	0.65	-	-	0.65	2
Mobile computing support	0.12	-	-	0.12	3
Business Application Services	1.61	-	0.20	1.81	
Application development	0.21	-	-	0.21	2
Small application support	0.21	-	-	0.21	6
Internet/intranet support	0.48	-	-	0.48	5
Requirements analysis	0.28	-	-	0.28	4
Custom application maintenance	0.43	-	0.20	0.63	4
Package application maintenance	-	-	-	-	-
IT Planning	0.55	-	-	0.55	
Strategic planning	0.11	-	-	0.11	6
Research and development	0.32	-	-	0.32	6
Disaster recovery planning	0.10	-	-	0.10	5
Governance coordination	0.02	-	-	0.02	2
IT Administration	0.85	-	-	0.85	
Asset management	0.15	-	-	0.15	5
IT procurement	0.25	-	-	0.25	5
Project management	0.17	-	-	0.17	3
Standards and policies development	0.13	-	-	0.13	3
Administrative support	0.01	-	-	0.01	1
Departmental management	0.14	-	-	0.14	2
<b>FTE TOTAL</b>	<b>7.60</b>	<b>-</b>	<b>0.70</b>	<b>8.30</b>	
<b>FTE as % of TTL IT FTE</b>	<b>92%</b>	<b>0%</b>	<b>8%</b>		

### PC Support Ratio

PCs	321
PC Support FTEs	1.85
<b>RATIO</b>	<b>174:1</b>

### Server Support Ratio

Servers	21
Server Admin FTEs	0.52
<b>RATIO</b>	<b>40:1</b>

### Distribution of Effort

Customer Services	30%
System Services	32%
Application Services	22%
IT Planning	7%
IT Administration	10%

### Overall Staffing Levels

<b>Total FTEs</b>	<b>428</b>
<b>IT FTEs</b>	<b>8.30</b>
<b>Ratio</b>	<b>1.94%</b>
<b>without shadow staff</b>	<b>1.78%</b>

### Costs

Average Unit Cost	\$ 62,249
Total Labor Cost	\$ 516,663

# IT Staffing Data: Dept. of Natural Resources

## APPENDIX B

- Overall IT staffing levels are below the typical benchmark of 3% – 5%, but this is mitigated by the high number of seasonal hires, which inflates the employee count
- Workstation-to-PC support staff ratio is within the typical benchmark of 100 – 150:1
- IT staff appear well allocated across customer services, system services, business application services, IT planning, and IT administration
- High numbers of “cooks” in desktop PC support are mitigated by the distributed nature of DNR IT services

Alaska Dept of Natural Resources O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	6.53	-	1.73	8.26	
Help Desk (Tier 1)	1.26	-	0.70	1.96	16
Desktop PC support (Tier 2)	4.15	-	0.66	4.81	28
Business application support	0.61	-	0.19	0.80	15
Training	0.51	-	0.18	0.69	16
System Services	3.63	-	0.38	4.01	
Network connectivity (WAN/LAN)	0.98	-	0.13	1.11	14
Server administration	1.72	-	0.02	1.74	12
Data center operations	0.07	-	-	0.07	4
Database administration	0.22	-	0.19	0.41	7
Security administration	0.44	-	-	0.44	10
Telephone systems support	0.04	-	0.04	0.08	4
Mobile computing support	0.16	-	-	0.16	7
Business Application Services	17.24	1.00	0.92	19.16	
Application development	4.14	1.00	0.36	5.50	29
Small application support	3.54	-	0.29	3.83	39
Internet/intranet support	3.50	-	0.07	3.57	34
Requirements analysis	3.32	-	0.02	3.34	28
Custom application maintenance	1.77	-	0.14	1.91	33
Package application maintenance	0.97	-	0.04	1.01	31
IT Planning	2.04	-	0.13	2.17	
Strategic planning	0.58	-	0.13	0.71	18
Research and development	0.67	-	-	0.67	11
Disaster recovery planning	0.53	-	-	0.53	15
Governance coordination	0.26	-	-	0.26	7
IT Administration	3.31	-	0.28	3.59	
Asset management	0.72	-	-	0.72	14
IT procurement	0.97	-	0.15	1.12	17
Project management	0.58	-	0.10	0.68	9
Standards and policies development	0.31	-	0.03	0.34	9
Administrative support	0.43	-	-	0.43	6
Departmental management	0.30	-	-	0.30	4
<b>FTE TOTAL</b>	<b>32.75</b>	<b>1.00</b>	<b>3.44</b>	<b>37.19</b>	
<b>FTE as % of TTL IT FTE</b>	<b>88%</b>	<b>3%</b>	<b>9%</b>		

PC Support Ratio	
PCs	884
PC Support FTEs	6.77
<b>RATIO</b>	<b>131:1</b>

Server Support Ratio	
Servers	33
Server Admin FTEs	1.74
<b>RATIO</b>	<b>19:1</b>

Distribution of Effort	
Customer Services	22%
System Services	11%
Application Services	52%
IT Planning	6%
IT Administration	10%

Overall Staffing Levels	
Total FTEs	3,026
IT FTEs	37.19
<b>Ratio</b>	<b>1.23%</b>
<b>without shadow staff</b>	<b>1.12%</b>

Costs	
Average Unit Cost	\$ 67,644
Total Labor Cost	\$ 541,153

# IT Staffing Data: Permanent Fund Corporation

## APPENDIX B

- ◆ Overall IT staffing levels are just above the typical benchmark of 3% – 5%
- ◆ Workstation-to-PC support staff ratio is below the typical benchmark of 100 – 150:1
- ◆ IT staff appear well allocated across customer services, system services, business application services, IT planning, and IT administration

Alaska Permanent Fund Corporation O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	0.95	-	-	0.95	
Help Desk (Tier 1)	0.03	-	-	0.03	1
Desktop PC support (Tier 2)	0.54	-	-	0.54	4
Business application support	0.33	-	-	0.33	4
Training	0.05	-	-	0.05	4
System Services	1.46	-	-	1.46	
Network connectivity (WAN/LAN)	0.46	-	-	0.46	4
Server administration	0.42	-	-	0.42	4
Data center operations	0.20	-	-	0.20	5
Database administration	0.10	-	-	0.10	4
Security administration	0.27	-	-	0.27	4
Telephone systems support	-	-	-	-	-
Mobile computing support	0.01	-	-	0.01	1
Business Application Services	0.57	-	-	0.57	
Application development	-	-	-	-	-
Small application support	0.09	-	-	0.09	3
Internet/intranet support	0.18	-	-	0.18	4
Requirements analysis	0.02	-	-	0.02	1
Custom application maintenance	0.01	-	-	0.01	1
Package application maintenance	0.27	-	-	0.27	3
IT Planning	0.37	-	-	0.37	
Strategic planning	0.07	-	-	0.07	1
Research and development	0.13	-	-	0.13	4
Disaster recovery planning	0.08	-	-	0.08	4
Governance coordination	0.09	-	-	0.09	5
IT Administration	0.80	-	-	0.80	
Asset management	0.08	-	-	0.08	5
IT procurement	0.17	-	-	0.17	5
Project management	0.26	-	-	0.26	4
Standards and policies development	0.05	-	-	0.05	1
Administrative support	0.17	-	-	0.17	5
Departmental management	0.07	-	-	0.07	1
<b>FTE TOTAL</b>	<b>4.15</b>	<b>-</b>	<b>-</b>	<b>4.15</b>	
<b>FTE as % of TTL IT FTE</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>		

PC Support Ratio	
PCs	50
PC Support FTEs	0.57
<b>RATIO</b>	<b>88:1</b>

Server Support Ratio	
Servers	18
Server Admin FTEs	0.42
<b>RATIO</b>	<b>43:1</b>

Distribution of Effort	
Customer Services	23%
System Services	35%
Application Services	14%
IT Planning	9%
IT Administration	19%

Overall Staffing Levels	
Total FTEs	82
IT FTEs	4.15
<b>Ratio</b>	<b>5.05%</b>
<b>without shadow staff</b>	<b>5.05%</b>

Costs	
Average Unit Cost	\$ 83,214
Total Labor Cost	\$ 344,923

# IT Staffing Data: Dept. of Public Safety

## APPENDIX

## B

- Overall IT staffing levels are below the typical benchmark of 3% – 5%
- Workstation-to-PC support staff ratio is within the typical benchmark of 100 – 150:1
- High proportion of shadow staff
- Shadow staff and high numbers of “cooks” in a few areas (help desk, desktop support, connectivity) mitigated by the highly distributed nature of the DPS

Alaska Dept of Public Safety O&M IT Staffing					
IT Function	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	4.72	0.04	2.36	7.12	
Help Desk (Tier 1)	1.94	0.04	1.11	3.09	25
Desktop PC support (Tier 2)	1.79	-	0.61	2.40	25
Business application support	0.57	-	0.14	0.71	17
Training	0.42	-	0.50	0.92	23
System Services	2.01	0.02	0.62	2.65	
Network connectivity (WAN/LAN)	0.84	-	0.41	1.25	22
Server administration	0.33	-	0.21	0.54	18
Data center operations	0.01	-	-	0.01	1
Database administration	0.20	0.02	-	0.22	6
Security administration	0.35	-	-	0.35	8
Telephone systems support	0.10	-	-	0.10	1
Mobile computing support	0.18	-	-	0.18	5
Business Application Services	7.16	0.90	-	8.06	
Application development	1.16	0.40	-	1.56	9
Small application support	0.83	-	-	0.83	10
Internet/intranet support	0.70	-	-	0.70	8
Requirements analysis	0.51	0.20	-	0.71	8
Custom application maintenance	3.63	0.30	-	3.93	12
Package application maintenance	0.33	-	-	0.33	6
IT Planning	1.16	0.04	0.40	1.60	
Strategic planning	0.19	-	0.20	0.39	6
Research and development	0.57	-	-	0.57	8
Disaster recovery planning	0.25	0.04	-	0.29	6
Governance coordination	0.15	-	0.20	0.35	4
IT Administration	1.70	1.00	1.95	4.65	
Asset management	0.15	-	0.10	0.25	3
IT procurement	0.30	-	0.25	0.55	7
Project management	0.30	1.00	0.15	1.45	7
Standards and policies development	0.35	-	0.15	0.50	6
Administrative support	-	-	1.25	1.25	3
Departmental management	0.60	-	0.05	0.65	4
<b>FTE TOTAL</b>	<b>16.75</b>	<b>2.00</b>	<b>5.32</b>	<b>24.07</b>	
<b>FTE as % of TTL IT FTE</b>	<b>70%</b>	<b>8%</b>	<b>22%</b>		

### PC Support Ratio

PCs	740
PC Support FTEs	5.49
<b>RATIO</b>	<b>135:1</b>

### Server Support Ratio

Servers	36
Server Admin FTEs	0.54
<b>RATIO</b>	<b>67:1</b>

### Distribution of Effort

Customer Services	30%
System Services	11%
Application Services	33%
IT Planning	7%
IT Administration	19%

### Overall Staffing Levels

<b>Total FTEs</b>	<b>914</b>
<b>IT FTEs</b>	<b>24.07</b>
<b>Ratio</b>	<b>2.63%</b>
<b>without shadow staff</b>	<b>2.05%</b>

### Costs

Average Unit Cost	\$ 77,575
Total Labor Cost	\$ 1,867,227

# IT Staffing Data: Dept. of Revenue

## APPENDIX

## B

- ◆ Overall IT staffing levels are above the typical benchmark of 3% – 5%
- ◆ Workstation-to-PC support staff ratio is within the typical benchmark of 100 – 150:1
- ◆ “Too many cooks” in:
  - Requirements analysis
  - Security administration
  - Disaster recovery planning

Alaska Dept of Revenue O&M IT Staffing					
FTE Totals	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	6.89	-	0.34	7.23	
Help Desk (Tier 1)	2.14	-	0.02	2.16	11
Desktop PC support (Tier 2)	2.47	-	0.20	2.67	14
Business application support	1.95	-	-	1.95	15
Training	0.33	-	0.12	0.45	11
System Services	3.85	0.20	0.89	4.94	
Network connectivity (WAN/LAN)	0.54	-	0.01	0.55	9
Server administration	1.49	-	0.01	1.50	10
Data center operations	0.22	-	0.01	0.23	3
Database administration	0.61	0.20	0.84	1.65	13
Security administration	0.94	-	0.02	0.96	12
Telephone systems support	-	-	-	-	-
Mobile computing support	0.05	-	-	0.05	4
Business Application Services	9.27	4.50	1.81	15.58	
Application development	3.18	3.90	0.49	7.57	17
Small application support	0.74	-	0.02	0.76	8
Internet/intranet support	0.47	-	0.51	0.98	10
Requirements analysis	1.65	0.60	0.01	2.26	22
Custom application maintenance	2.90	-	0.78	3.68	15
Package application maintenance	0.33	-	-	0.33	7
IT Planning	1.90	0.40	0.06	2.36	
Strategic planning	0.27	-	0.02	0.29	6
Research and development	1.14	0.40	0.01	1.55	16
Disaster recovery planning	0.32	-	0.01	0.33	10
Governance coordination	0.17	-	0.02	0.19	6
IT Administration	2.09	0.90	0.72	3.71	
Asset management	0.36	-	-	0.36	8
IT procurement	0.35	-	0.22	0.57	11
Project management	0.84	0.90	0.12	1.86	10
Standards and policies development	0.11	-	0.02	0.13	6
Administrative support	0.18	-	0.21	0.39	7
Departmental management	0.25	-	0.15	0.40	5
<b>FTE TOTAL</b>	<b>24.00</b>	<b>6.00</b>	<b>3.82</b>	<b>33.82</b>	
<b>FTE as % of TTL IT FTE</b>	<b>71%</b>	<b>18%</b>	<b>11%</b>		

PC Support Ratio	
PCs	638
PC Support FTEs	4.83
<b>RATIO</b>	<b>132:1</b>

Server Support Ratio	
Servers	49
Server Admin FTEs	1.50
<b>RATIO</b>	<b>33:1</b>

Distribution of Effort	
Customer Services	21%
System Services	15%
Application Services	46%
IT Planning	7%
IT Administration	11%

Overall Staffing Levels	
<b>Total FTEs</b>	<b>488</b>
<b>IT FTEs</b>	<b>33.82</b>
<b>Ratio</b>	<b>6.93%</b>
<b>without shadow staff</b>	<b>6.15%</b>

Costs	
Average Unit Cost	\$ 105,982
Total Labor Cost	\$ 3,583,769

# IT Staffing Data: Dept. of Transportation & Public Facilities

## APPENDIX

## B

- ◆ Overall IT staffing levels are below the typical benchmark of 3% – 5%
- ◆ Workstation-to-PC support staff ratio is below the typical benchmark of 100 – 150:1
- ◆ “Too many cooks” in:
  - Security administration
  - Standards/policies development
  - High numbers of “cooks” in other areas are mitigated by the highly distributed nature of the DOT

Alaska Dept of Transportation & Public Facilities O&M IT Staffing					
FTE Totals	Dept IT Staff	Contracted IT Staff	Shadow Staff	FTE TOTAL	"Cooks"
Customer Services	14.14	0.71	0.40	15.25	
Help Desk (Tier 1)	3.74	0.15	0.06	3.95	38
Desktop PC support (Tier 2)	6.29	0.25	0.20	6.74	30
Business application support	2.63	0.07	0.04	2.74	29
Training	1.48	0.24	0.10	1.82	30
System Services	8.82	0.30	4.50	13.62	
Network connectivity (WAN/LAN)	2.08	0.15	3.25	5.48	36
Server administration	2.80	0.07	1.05	3.92	32
Data center operations	0.12	-	-	0.12	4
Database administration	1.29	0.04	-	1.33	18
Security administration	1.59	0.04	-	1.63	30
Telephone systems support	-	-	0.20	0.20	2
Mobile computing support	0.94	-	-	0.94	13
Business Application Services	12.43	0.95	-	13.38	
Application development	3.40	0.15	-	3.55	18
Small application support	1.36	0.15	-	1.51	19
Internet/intranet support	1.04	-	-	1.04	15
Requirements analysis	1.46	0.66	-	2.12	19
Custom application maintenance	3.80	-	-	3.80	21
Package application maintenance	1.37	-	-	1.37	21
IT Planning	4.17	-	-	4.17	
Strategic planning	1.39	-	-	1.39	26
Research and development	1.77	-	-	1.77	28
Disaster recovery planning	0.68	-	-	0.68	17
Governance coordination	0.33	-	-	0.33	9
IT Administration	5.44	0.15	0.10	5.68	
Asset management	0.79	-	-	0.79	17
IT procurement	1.28	-	-	1.28	24
Project management	1.41	0.15	0.10	1.66	23
Standards and policies development	0.52	-	-	0.52	12
Administrative support	0.67	-	-	0.67	14
Departmental management	0.77	-	-	0.77	10
<b>FTE TOTAL</b>	<b>45.00</b>	<b>2.11</b>	<b>5.00</b>	<b>52.10</b>	
<b>FTE as % of TTL IT FTE</b>	<b>86%</b>	<b>4%</b>	<b>10%</b>		

PC Support Ratio	
PCs	947
PC Support FTEs	10.69
<b>RATIO</b>	<b>89:1</b>

Server Support Ratio	
Servers	58
Server Admin FTEs	3.92
<b>RATIO</b>	<b>15:1</b>

Distribution of Effort	
Customer Services	29%
System Services	26%
Application Services	26%
IT Planning	8%
IT Administration	11%

Overall Staffing Levels	
Total FTEs	3,221
IT FTEs	52.10
<b>Ratio</b>	<b>1.62%</b>
<b>without shadow staff</b>	<b>1.46%</b>

Costs	
Average Unit Cost	\$ 78,101
Total Labor Cost	\$ 4,069,306

# IT Staffing Matrix Definitions

## APPENDIX

# B

The following presents IT Staffing Matrix definitions for each category presented in the preceding analysis.

### **CUSTOMER SERVICES**

Those functions related to directly supporting users of IT systems and services.

#### ◆ **Help Desk (Tier 1)**

The processes related to providing a first point of contact for users to report problems. Includes initial problem resolution, triage, and problem escalation.

#### ◆ **Desktop PC Support (Tier 2)**

The processes related to setup, installation, maintenance, and general desktop software support of the organization's desktop computers, applications, and peripherals.

#### ◆ **Business Application Support**

The processes related to supporting the use of the organization's business application software.

#### ◆ **Training**

The processes related to providing technology-related instruction to staff aimed at enhancing their skills, knowledge, and performance. Includes training requirements analysis, course design and development, and training delivery.

# IT Staffing Matrix Definitions

## APPENDIX

## B

### SYSTEM SERVICES

Those functions related to implementing, maintaining and supporting the organization's computers, systems software, and connectivity.

#### ◆ Network Connectivity (WAN/LAN)

The processes related to implementing and maintaining the operational integrity of the organization's local and wide-area networks. These processes include responding to user requests for assistance, performance monitoring, coordinating with external network service providers and taking appropriate corrective actions as needed.

#### ◆ Server Administration

The processes related implementing and maintaining network servers. These processes include administration and operation of servers and other logical network devices, performance monitoring, and administering configuration data.

#### ◆ Data Center Operations

The processes related to administering the operation of the host/mainframe computing platforms, managing their operating systems to keep functionality at maximum performance levels, and managing associated peripheral devices.



# IT Staffing Matrix Definitions

## APPENDIX

## B

### SYSTEM SERVICES CONT'D

#### ◆ Database Administration

The processes related to planning, implementing, and administering the data structures required to support the organization's applications portfolio, and to maintaining the organization's data structures. Includes synchronization, validation, tuning, backup, and recovery.

#### ◆ Security Administration

The processes related to developing, maintaining, and administering the security plan for the organization's host processors, servers, personal computers, communication devices and networks.

#### ◆ Telephone Systems Support

The processes related to implementing and maintaining the operational integrity of the organization's voice network. This includes responding to user requests for assistance, administering data associated with the voice network, performance monitoring, coordinating with telecommunications providers and taking appropriate corrective actions as needed.

#### ◆ Mobile Computing Support

The processes related to implementing and maintaining the organization's radio and wireless infrastructure for data communications with mobile equipment and personnel. This includes responding to user requests for assistance, performance monitoring, coordinating with vendors and regulatory bodies, and taking appropriate corrective actions as needed.

# IT Staffing Matrix Definitions

## APPENDIX

## B

### **BUSINESS APPLICATION SERVICES**

Those functions related to providing, maintaining and supporting the use of software needed to meet the operational, management, and reporting requirements of the organization.

#### ◆ **Application Development**

The processes related to engineering new software that meets system-wide needs, integrates third party software, and accommodates special requests. Includes major enhancements to existing applications. Development phases include design, coding, testing, and implementation.

#### ◆ **Custom Application Maintenance**

The processes related to updating and making minor enhancements to existing software applications to meet new requirements and comply with external mandates. Includes extracting data for use by other applications, and customizing reports for users.

#### ◆ **Package Application Maintenance**

The processes related to installing, integrating, interfacing, and testing business-specific packaged applications and their associated data, including managing vendor relationships, and providing necessary business context for integration. Includes installing new releases and bug fixes.

# IT Staffing Matrix Definitions

## APPENDIX

## B

### BUSINESS APPLICATION SERVICES CONT'D

#### ◆ Small Application Support

The processes related to responding to user requests for assistance in developing and maintaining single-user applications and their associated data structures.

#### ◆ Internet/intranet Support

The processes related to planning, implementing and supporting Internet and intranet services for the organization, including maintaining requisite system resources and tools.

#### ◆ Requirements Analysis

The processes related to describing business needs, evaluating alternatives, recommending an approach to address the requirements and creating the data and process models and detailed specifications for software that would meet the requirements.

# IT Staffing Matrix Definitions

## APPENDIX

## B

### IT PLANNING

Those functions related to the planning and oversight of the technology function at the organization.

#### ◆ Strategic Planning

The processes related to identifying and evaluating the future directions for IT application, networks, and hardware for the organization, including: capacity planning, strategic planning, technology research, and feasibility studies.

#### ◆ Research and Development

The processes related to evaluation and testing of current and future IT products and services, and to the deployment of pilot projects to test the viability of these technologies for the organization. Includes dissemination of relevant information to appropriate parties.

#### ◆ Disaster Recovery Planning

The processes related to developing, maintaining, updating, and testing the organization's IT disaster recovery/business resumption plan, and to activating and managing the plan in the event of a disaster.

#### ◆ Governance Coordination

The processes related to supporting the organization's management on matters related to IT decision-making. Activities may include coordinating meetings, establishing agendas, providing background materials and recommendations, keeping minutes and preparing presentations.

# IT Staffing Matrix Definitions

## APPENDIX

## B

### IT ADMINISTRATION

Those functions related to the planning, oversight, and security of the technology function at the organization.

#### ◆ Asset Management

The processes related to managing the IT properties of the organization. Includes tracking serial numbers, licenses, warranties, and inventory.

#### ◆ IT Procurement

The processes related to acquisition of goods and services in support of all IT functions; including the development of RFP's, evaluation and selection of vendors, management of purchasing activities, receipt and inventory of goods, and tracking of warranty information and performance guarantees.

#### ◆ Project Management

Those processes related to the oversight and coordination of major technology initiatives.

#### ◆ Standards and Policies Development

Those processes related to the creation and updating of enterprise-wide standards and policies related to hardware and software procurement.

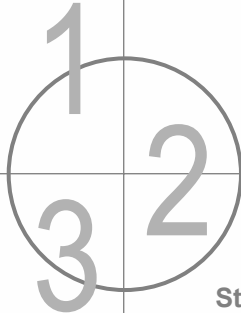
#### ◆ Administrative Support

The processes related to the provision of clerical, administrative, and related services required for the ongoing operation of the IT department.

#### ◆ Departmental Management

The processes related to management and oversight of the organization's technology functions, including: staff evaluation, quality assurance, and budgeting.

Assessment



Strategy  
Development

Implementation  
Planning

# customer satisfaction survey results

State of Alaska  
Statewide Information Technology Plan  
October 31, 2002

# Customer Satisfaction Survey: Summary of Findings

## APPENDIX

## C

As part of the assessment, Pacific Technologies conducted a State-wide survey of employees regarding their satisfaction with IT decision making, applications, service delivery, and technical infrastructure. Managers, staff and temporary employees completed a total of 3,823 surveys. The survey asked State staff to rank their level of agreement with 37 positively-worded statements on a scale of 1 (never agree) through 7 (always agree).

- ◆ Overall satisfaction with applications is higher than any other category (average = 5.18)
- ◆ Respondents appear least satisfied with IT decision-making processes
- ◆ IT staff are perceived to be skilled and capable
- ◆ Overall, users express high levels of satisfaction with the following applications:
  - Personal productivity applications
  - AKPAY
  - Email/scheduling
  - The State's website
  - Workplace Alaska
- ◆ Respondents expressed high levels of satisfaction with PC support and responsiveness of departmental/divisional IT staff
- ◆ Respondents express lowest levels of satisfaction with:
  - IT decision-making processes
  - ITG charge-back model
  - Remote access computing
- ◆ On average, highest satisfaction levels were reported by Legislature staff; lowest levels of satisfaction were reported by Corrections staff

# Customer Satisfaction Survey: Sample of Survey Comments

## APPENDIX

## C

In addition to the scored responses, survey respondents also provided free-form comments on the services they receive and the applications they use. The following presents themes that emerged from these comments:

- ◆ Many respondents are unaware of what the ITG is or what services they provide
- ◆ There are large discrepancies in the quality of service received between agencies/departments and even within divisions of departments
- ◆ Many staff are using outdated PCs and software (i.e., personal productivity tools and desktop OS)
- ◆ More training is needed for end users
- ◆ The State would benefit from a single email/calendaring system
- ◆ Bandwidth, service, and equipment in remote locations are inadequate
- ◆ The State should work toward integration of key systems
- ◆ Although most seem happy with MS Office, many feel that Word is inferior to Word Perfect
- ◆ In general the State's website is well thought of, but users feel it is difficult to navigate
- ◆ AKSAS and AKPAY need to be replaced
- ◆ Many perceive that IT support services are understaffed
- ◆ Access to State computing resources while away from the office should be improved

**Graphs presenting survey data follow. The list of survey questions is provided at the end of this appendix.**

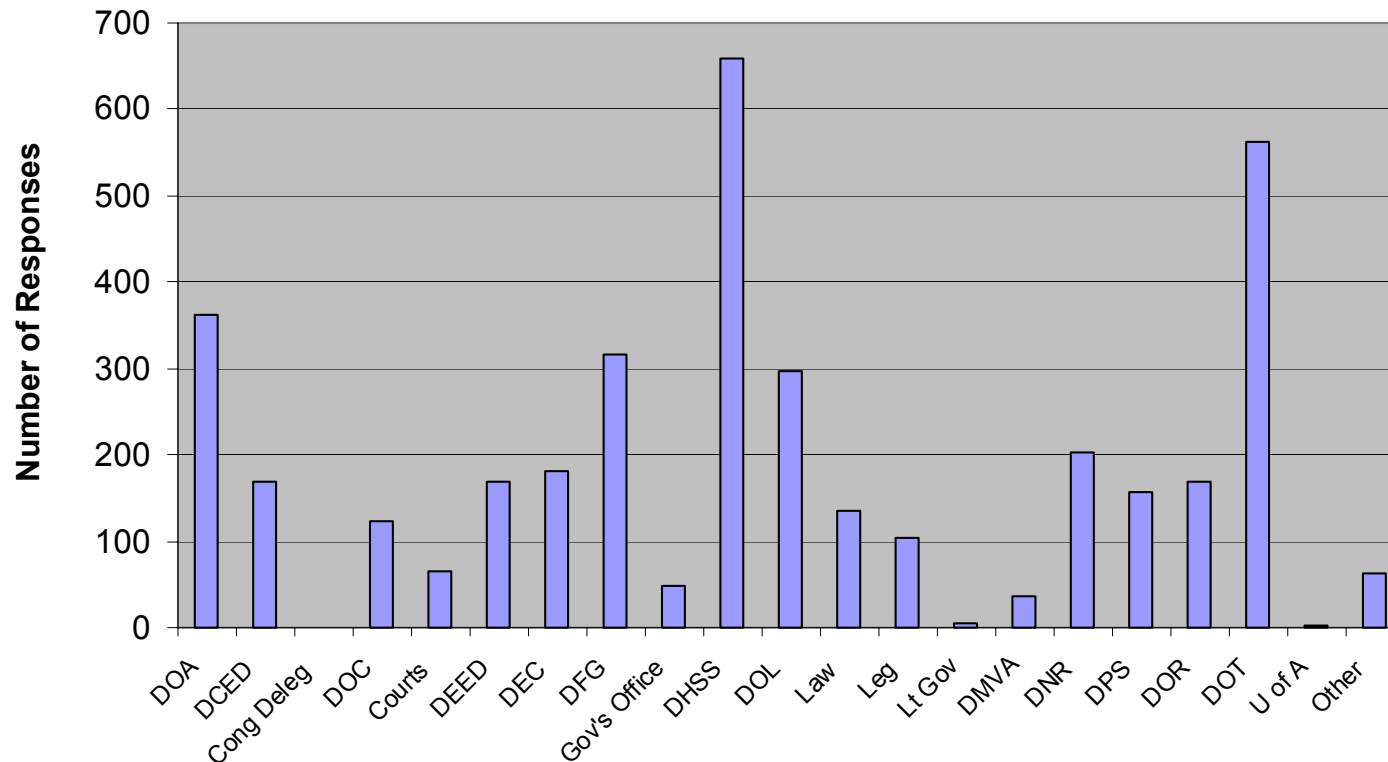


# Survey Response by Department

## APPENDIX

## C

### Response by Department

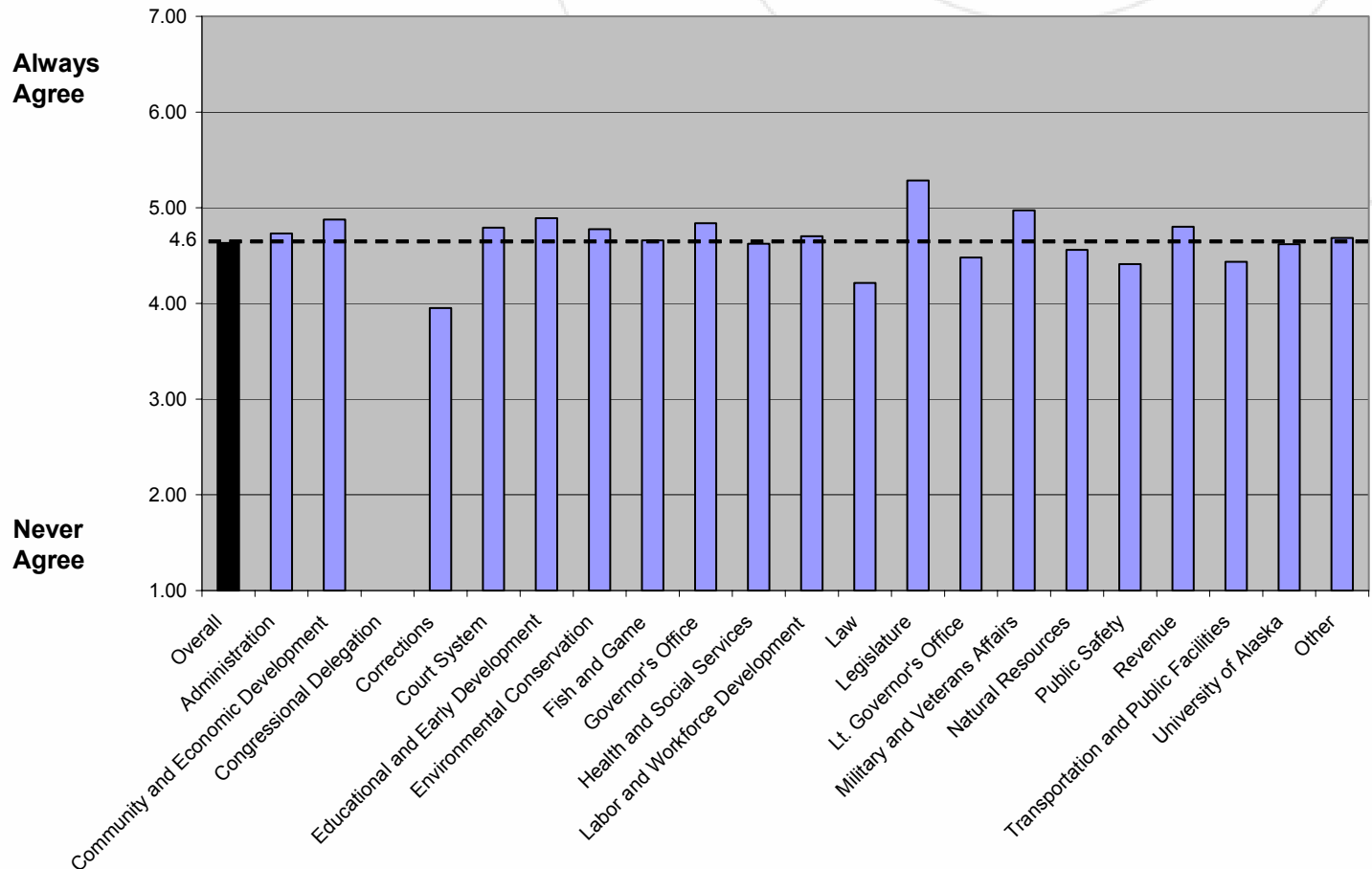


# Average Score by Department

## APPENDIX

C

- ◆ The graph to the right presents the overall average score by department
- ◆ The overall average score across all departments is 4.6

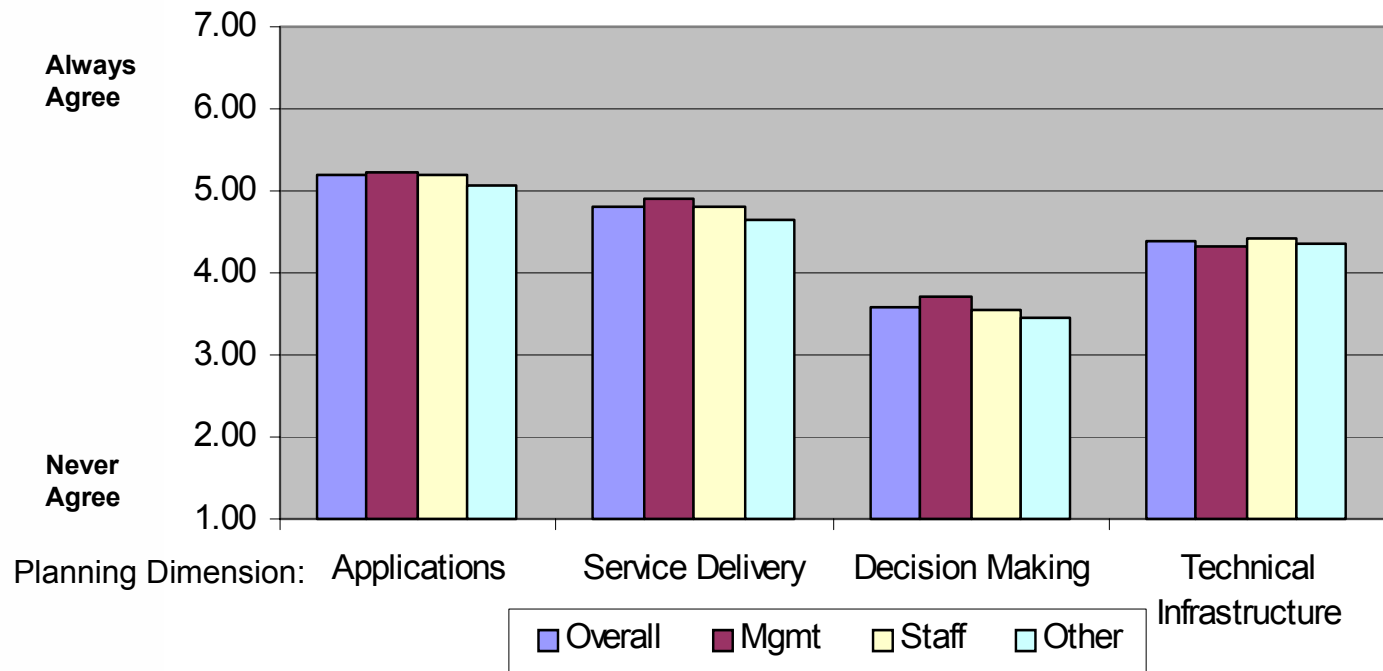


# [ Average Score by Position & “Planning Dimension” ]

## APPENDIX

C

- ◆ We grouped questions according to the four dimensions of IT planning:
- Applications
  - Service Delivery
  - Decision Making
  - Technical Infrastructure

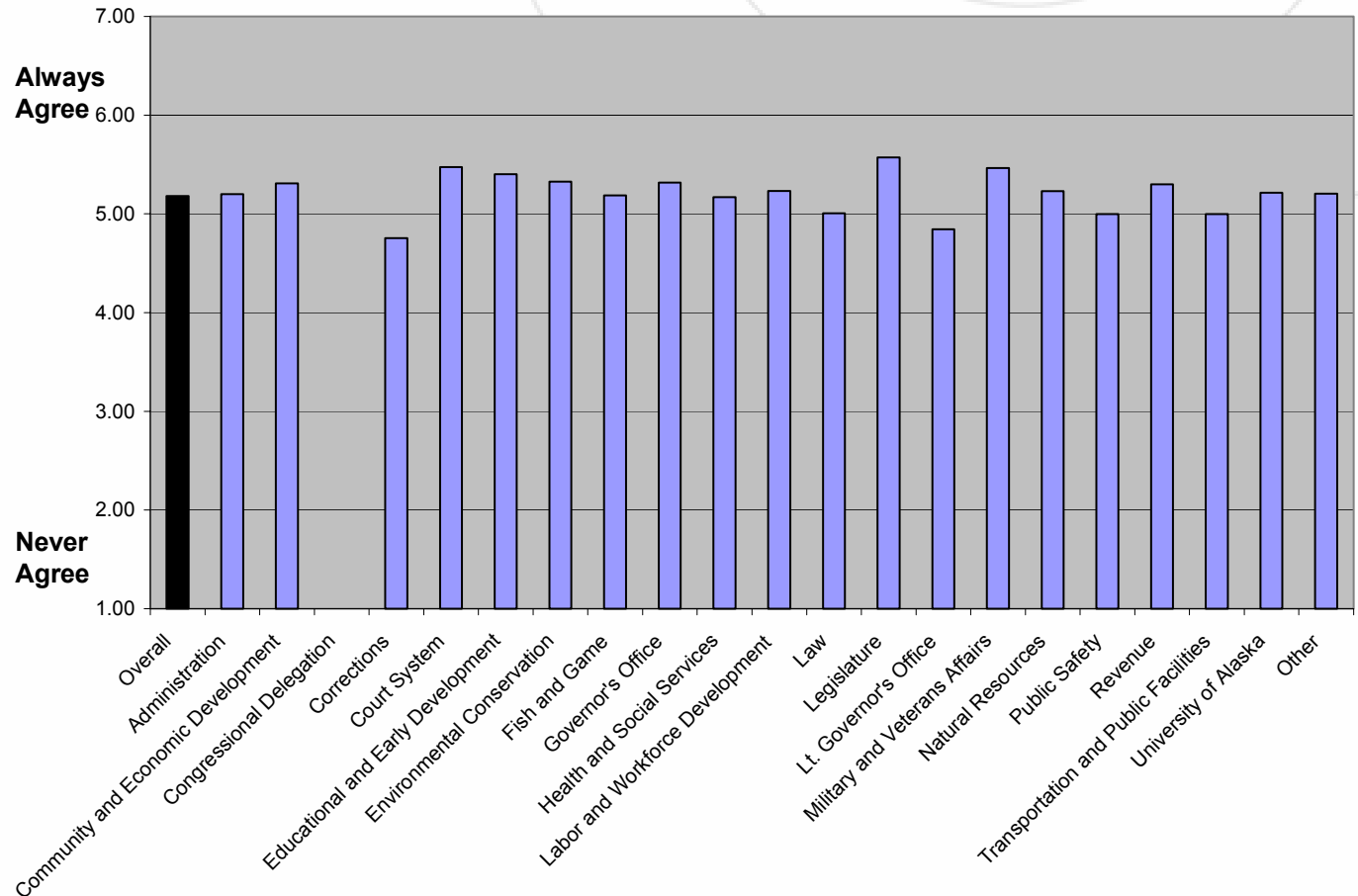


# Average Score on Applications Questions by Dept.

## APPENDIX

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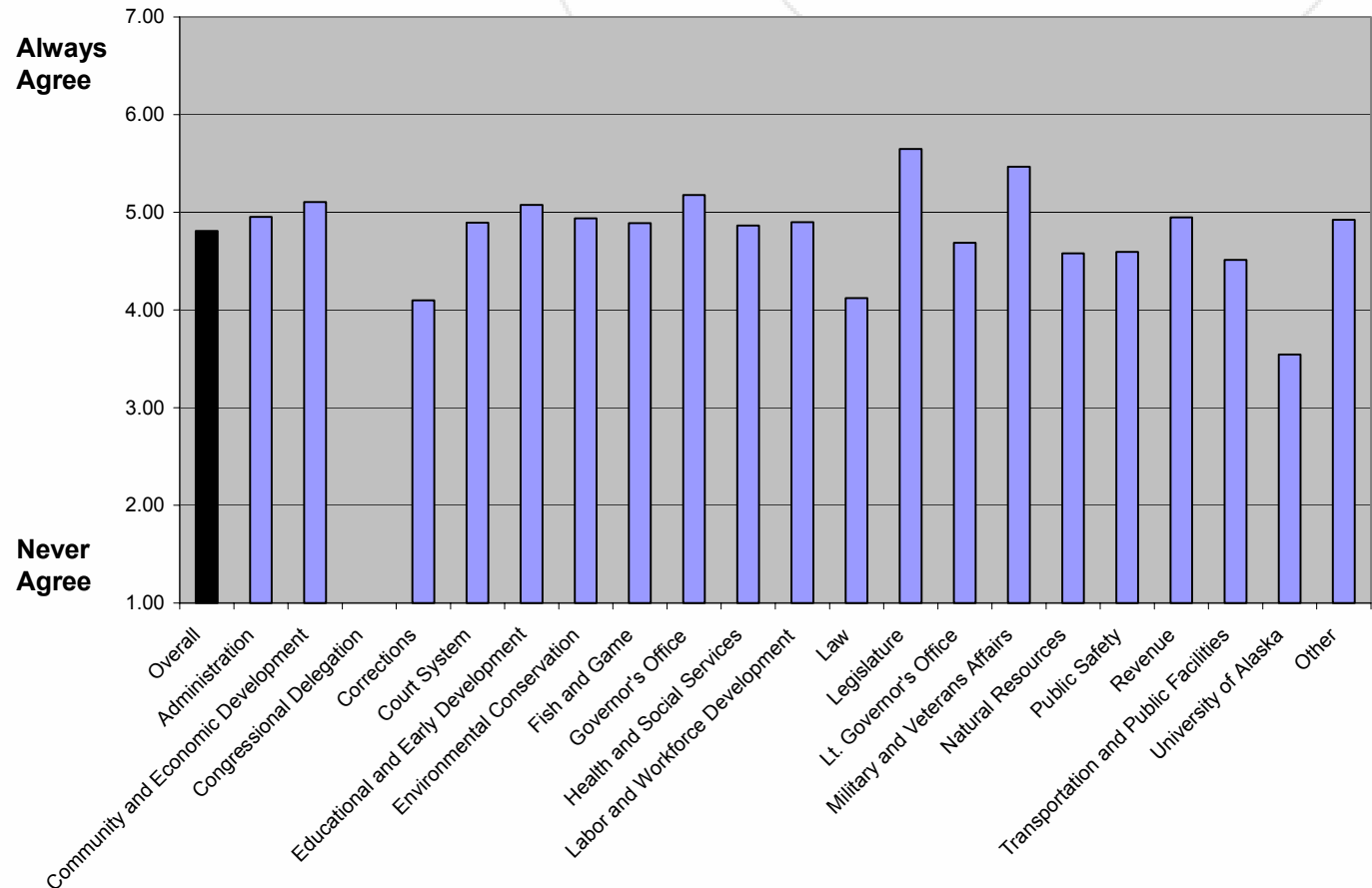
- ◆ The scores at right pertain to questions regarding the State's application portfolio



# Average Score on Service Delivery Questions by Dept.

## APPENDIX

C



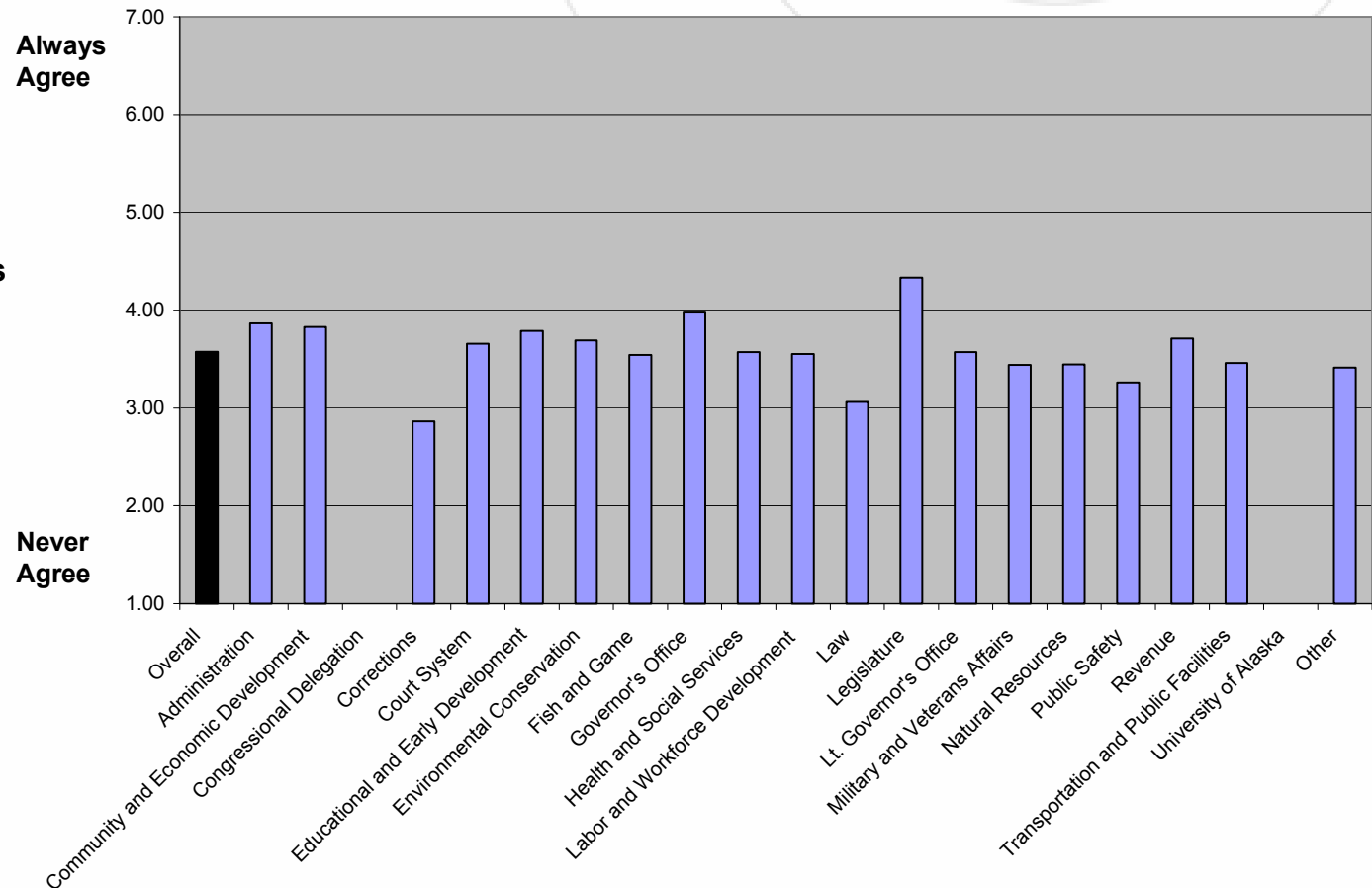
◆ The scores at right pertain to questions regarding the State's IT service delivery

# Average Score on IT Decision Making Questions by Dept.

## APPENDIX

C

- ◆ The scores at right pertain to questions regarding the State's IT decision making

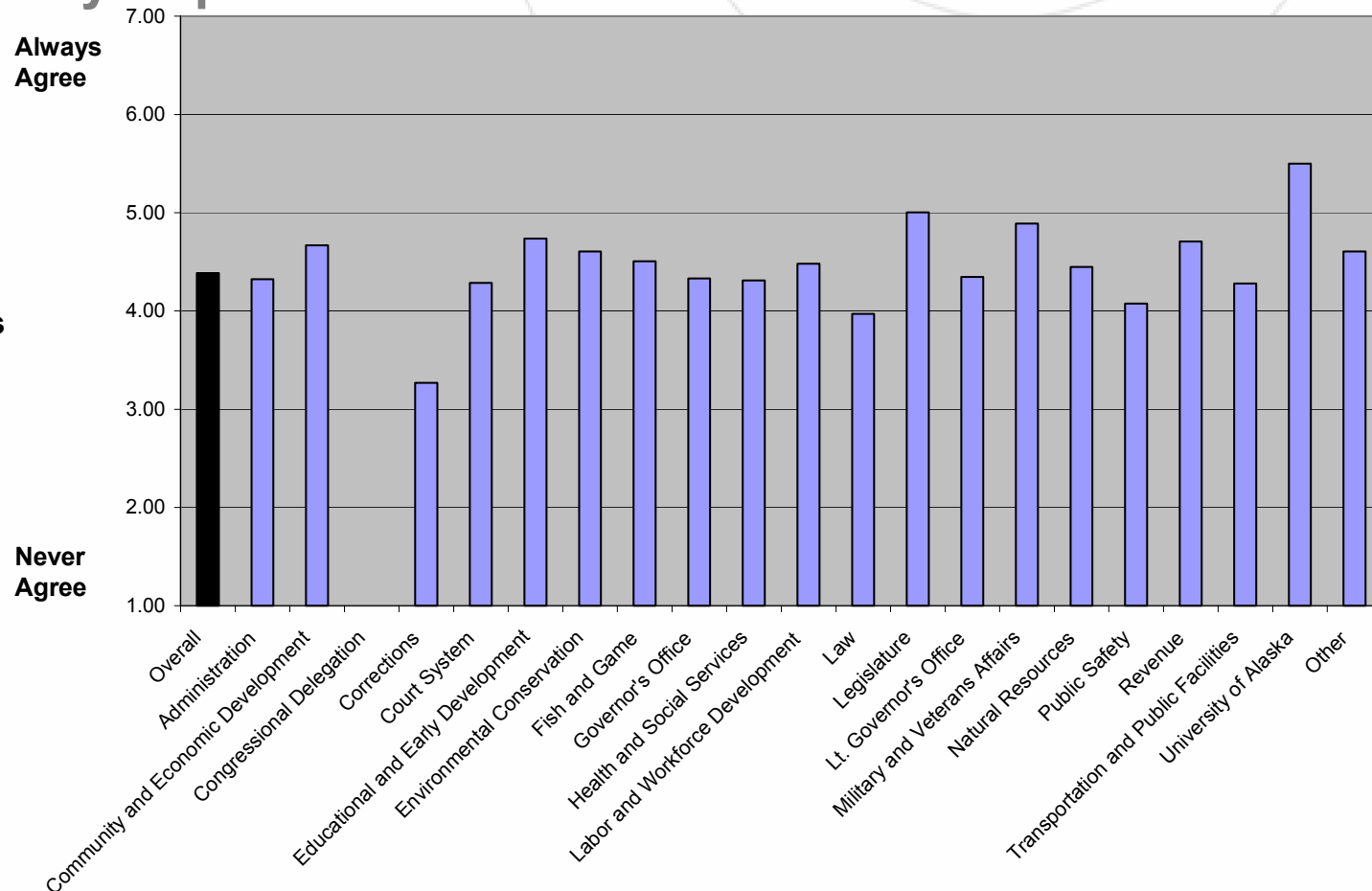


# Average Score on Technical Infrastructure Questions by Dept.

## APPENDIX

C

- ◆ The scores at right pertain to questions regarding the State's technical infrastructure

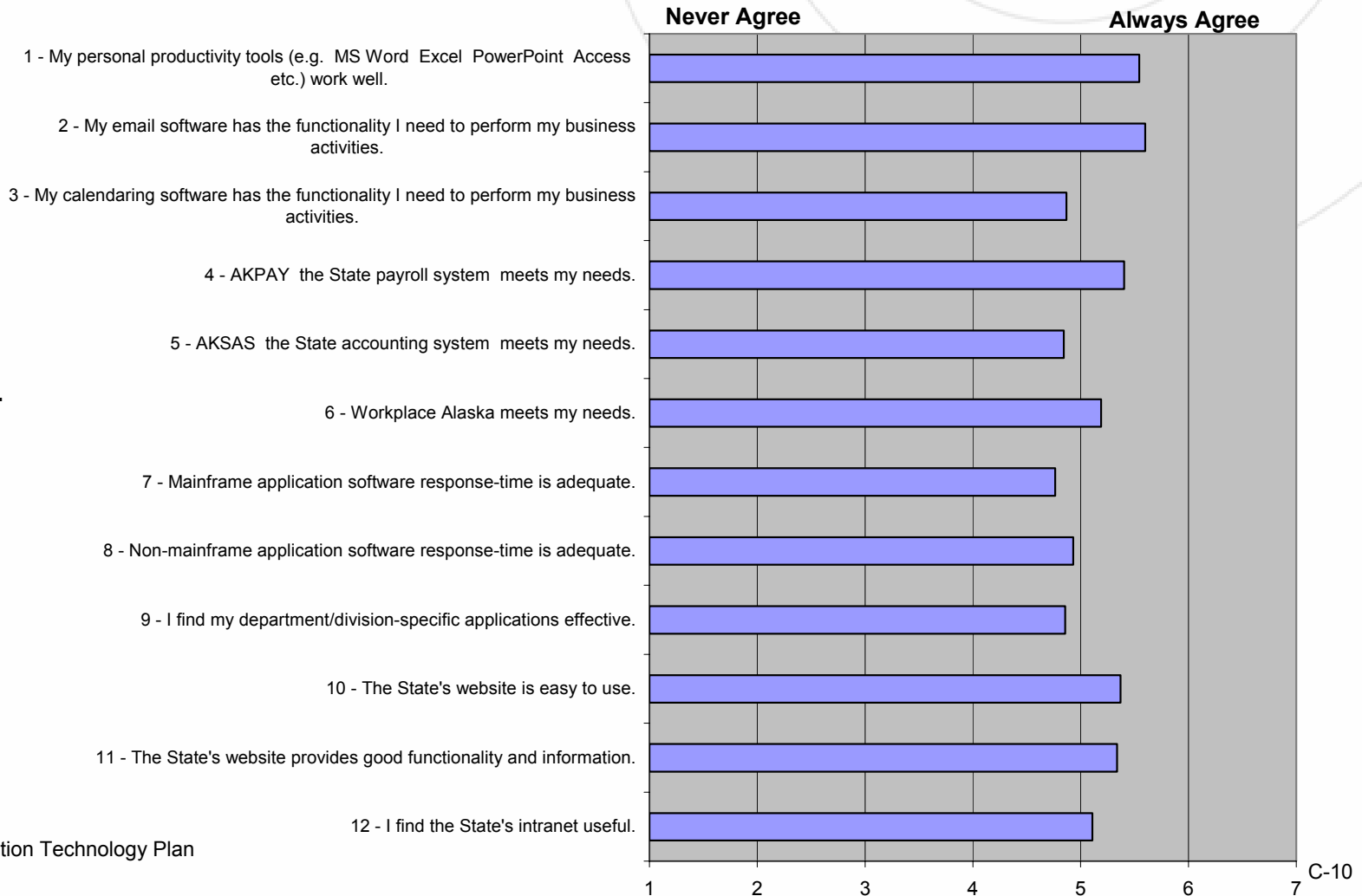


# Average Score: Applications

## APPENDIX

C

◆ The data to the right presents the average scores for application-related questions



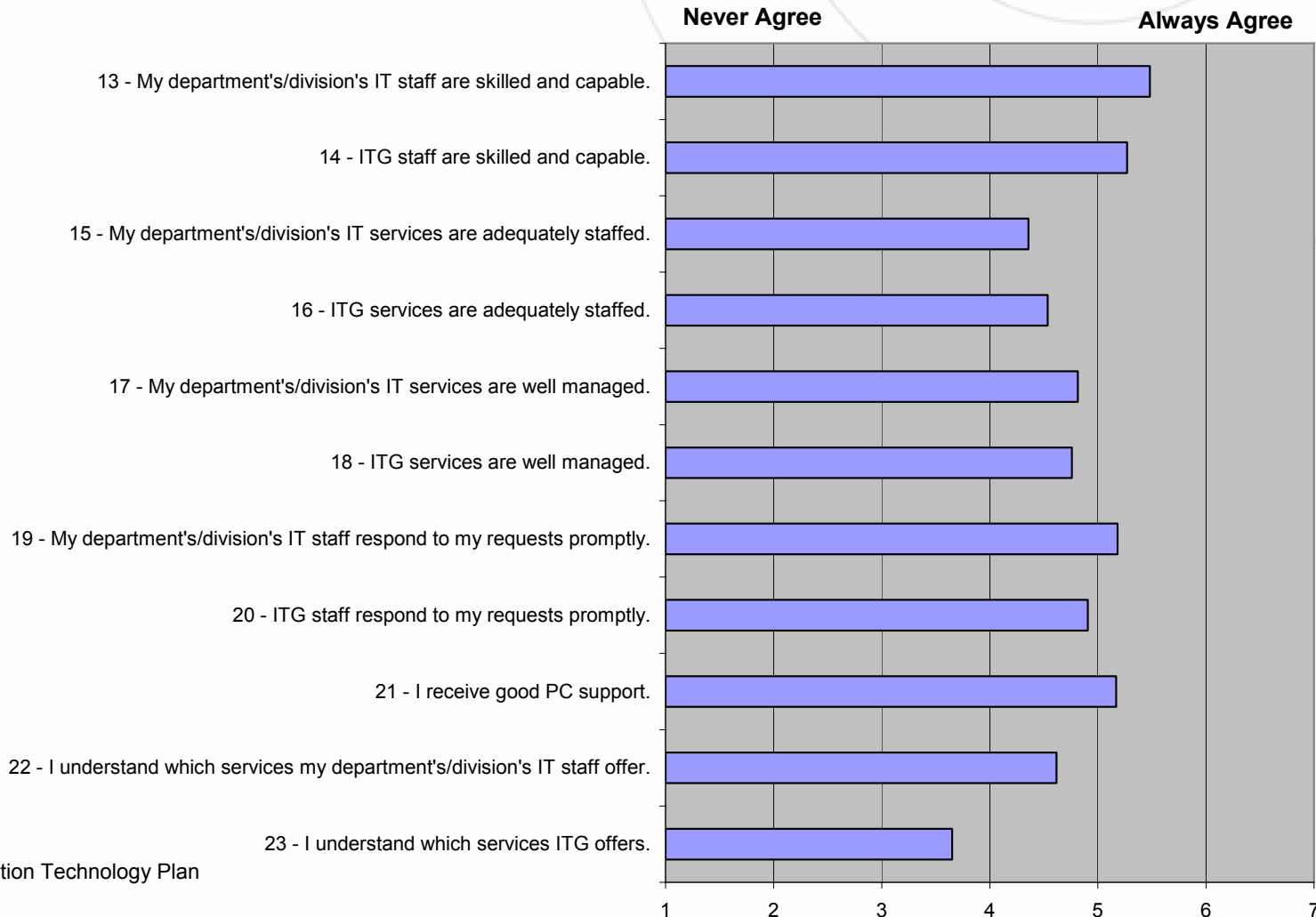


# Average Score: Service Delivery

## APPENDIX

C

◆ The data to the right presents the average scores for IT service delivery-related questions

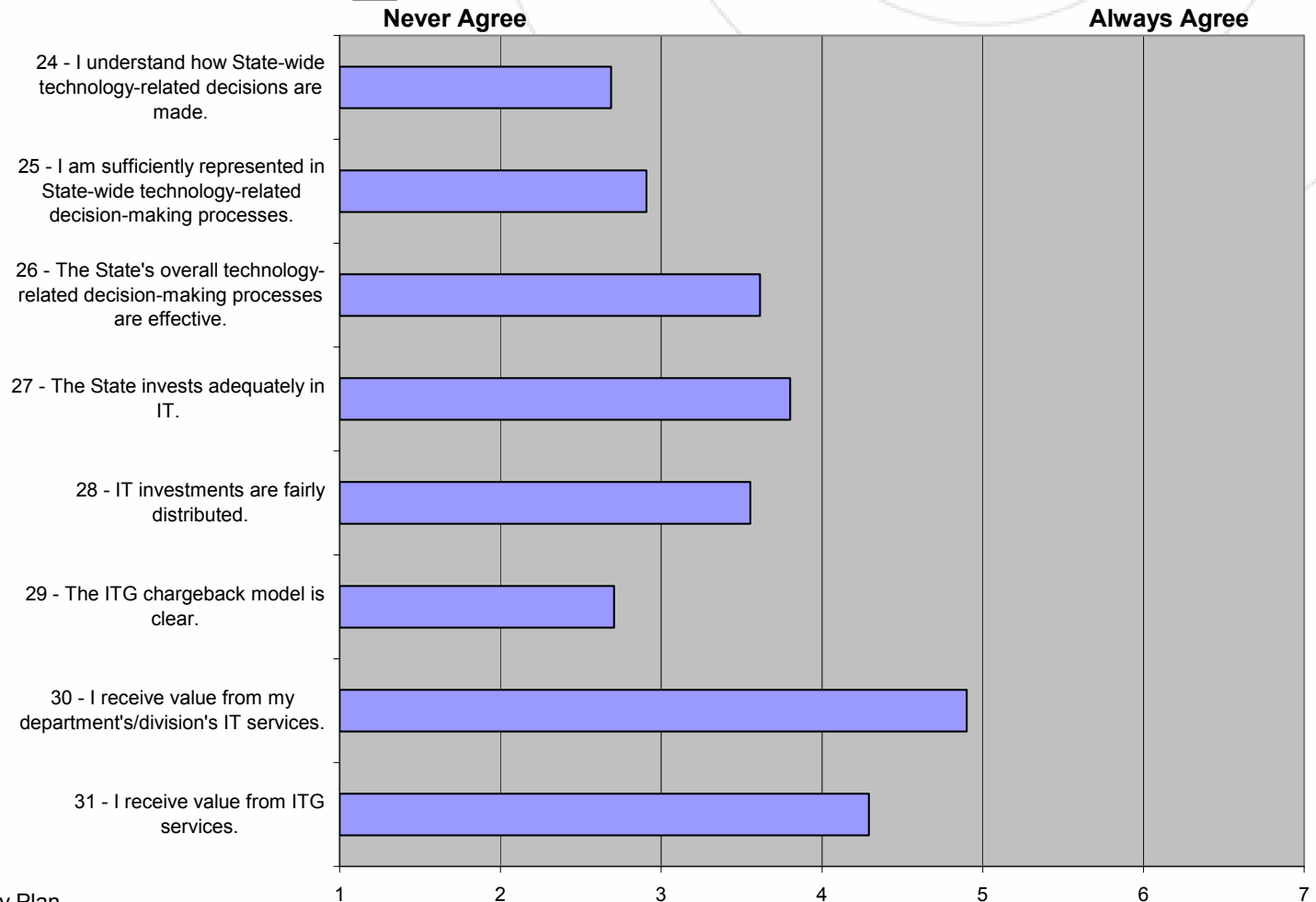


# Average Score: IT Decision Making

## APPENDIX

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- ◆ The data to the right presents the average scores for IT decision making-related questions

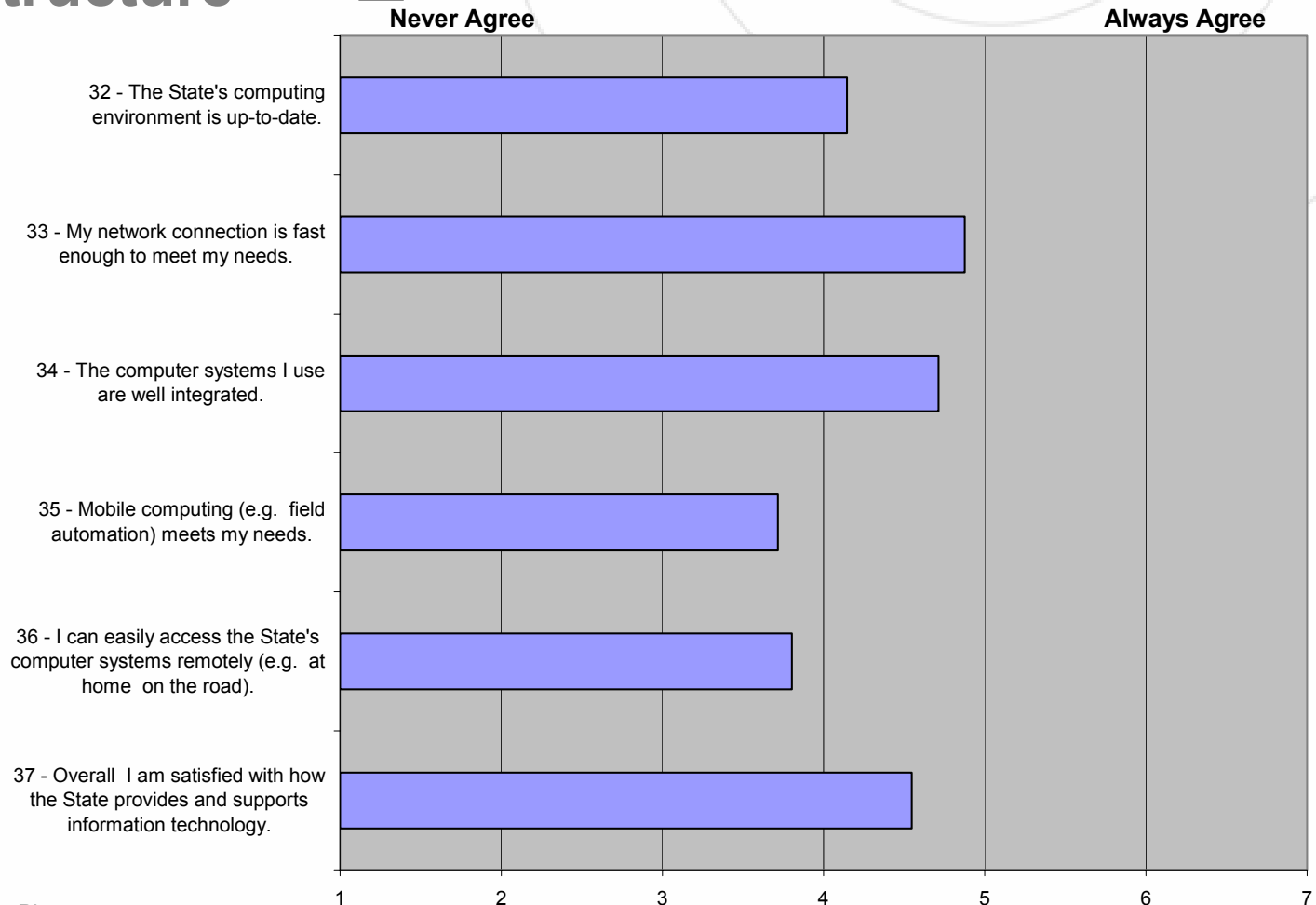


# Average Score: Technical Infrastructure

## APPENDIX

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- ◆ The data to the right presents the average scores for technical infrastructure-related questions
- ◆ Average scores by department follow this exhibit



# Survey Questions/Average Score by Dept.

## APPENDIX

C

Ques #	Overall Average	Administration	Community and Economic Development	Congressional Delegation	Corrections	Court System	Educational and Early Development	Environmental Conservation	Fish and Game	Governor's Office	Health and Social Services	Labor and Workforce Development	Law	Legislature	Lt. Governor's Office	Military and Veterans Affairs	Natural Resources	Public Safety	Revenue	Transportation and Public Facilities	University of Alaska	Other	
1	My personal productivity tools (e.g. MS Word Excel PowerPoint Access etc.) work well.	5.5	5.4	5.5	0.0	5.3	5.7	5.9	5.7	5.6	5.5	5.5	5.7	4.9	5.6	4.8	5.8	5.6	5.3	5.7	5.5	4.0	5.8
2	My email software has the functionality I need to perform my business activities.	5.6	5.6	5.5	0.0	5.3	6.0	5.8	6.1	5.6	5.5	5.7	5.4	5.3	5.9	4.8	5.8	5.7	5.5	5.7	5.4	5.0	5.5
3	My calendaring software has the functionality I need to perform my business activities.	4.9	4.7	4.7	0.0	4.7	5.3	5.1	5.8	5.1	4.5	5.4	4.7	4.5	5.0	4.8	5.2	4.5	3.9	4.8	4.0	5.5	4.7
4	AKPAY the State payroll system meets my needs.	5.4	5.3	5.5	0.0	5.2	5.9	5.7	5.4	5.1	6.0	5.3	5.6	5.5	5.8	2.0	5.4	5.4	4.9	5.7	5.5	n/a	5.8
5	AKSAS the State accounting system meets my needs.	4.8	5.1	4.9	0.0	4.4	5.1	4.9	4.7	4.8	5.6	4.8	4.8	5.0	5.5	5.0	5.0	4.5	4.4	5.2	4.8	6.0	5.0
6	Workplace Alaska meets my needs.	5.2	5.3	5.5	0.0	5.1	5.4	5.7	5.4	4.9	5.2	4.8	5.3	5.2	5.5	4.8	5.1	5.4	5.0	5.5	5.3	7.0	5.2
7	Mainframe application software response-time is adequate.	4.8	4.8	4.9	0.0	3.8	5.0	5.0	4.9	4.8	4.9	4.7	4.8	4.4	5.0	4.6	5.4	4.8	4.8	4.9	4.7	5.0	4.9
8	Non-mainframe application software response-time is adequate.	4.9	4.6	5.0	0.0	4.1	5.1	5.2	4.9	5.1	5.0	5.0	5.2	4.2	5.1	4.4	5.4	5.2	4.8	5.1	4.9	5.0	5.1
9	I find my department/division-specific applications effective.	4.9	4.9	5.0	0.0	3.8	4.8	5.1	4.9	5.2	4.9	4.7	4.8	4.5	5.6	4.4	5.6	4.9	4.6	4.9	4.8	2.0	5.1
10	The State's website is easy to use.	5.4	5.5	5.7	0.0	5.4	5.8	5.4	5.2	5.3	5.8	5.3	5.6	5.6	5.8	5.6	5.6	5.4	5.4	5.5	4.9	6.0	5.2

# Survey Questions (cont.)

## APPENDIX

C

Ques #		Overall Average	Administration	Community and Economic Development	Congressional Delegation	Corrections	Court System	Educational and Early Development	Environmental Conservation	Fish and Game	Governor's Office	Health and Social Services	Labor and Workforce Development	Law	Legislature	Lt. Governor's Office	Military and Veterans Affairs	Natural Resources	Public Safety	Revenue	Transportation and Public Facilities	University of Alaska	Other
11	The State's website provides good functionality and information.	5.3	5.5	5.7	0.0	5.2	5.7	5.4	5.2	5.3	5.8	5.3	5.5	5.5	5.8	5.6	5.6	5.3	5.3	5.5	5.0	6.0	5.1
12	I find the State's intranet useful.	5.1	5.2	5.4	0.0	4.7	5.5	5.3	5.1	5.0	5.2	5.1	5.0	5.3	5.8	5.2	5.3	5.2	5.1	5.1	4.9	7.0	4.9
13	My department's/division's IT staff are skilled and capable.	5.5	5.6	5.5	0.0	4.8	5.0	5.8	5.7	5.7	5.5	5.5	5.5	4.5	5.9	5.8	6.4	5.5	5.3	5.6	5.3	4.0	5.8
14	ITG staff are skilled and capable.	5.3	5.4	5.4	0.0	4.6	5.3	5.5	5.5	5.3	5.6	5.3	5.4	4.8	5.7	5.3	5.3	5.4	5.0	5.2	5.1	4.0	5.4
15	My department's/division's IT services are adequately staffed.	4.4	4.5	4.8	0.0	3.3	4.6	4.6	4.3	4.5	5.0	4.4	4.6	3.7	5.5	5.0	4.9	3.8	4.2	4.5	4.0	2.0	4.5
16	ITG services are adequately staffed.	4.5	4.7	4.9	0.0	3.6	4.9	4.7	4.7	4.6	5.0	4.5	4.7	4.4	5.6	4.8	5.2	4.2	4.3	4.6	4.2	4.0	4.3
17	My department's/division's IT services are well managed.	4.8	4.9	5.1	0.0	3.7	4.7	5.3	4.8	5.1	5.4	4.9	4.9	3.8	5.8	4.8	5.7	4.7	4.6	5.1	4.4	4.0	5.0
18	ITG services are well managed.	4.8	4.9	5.1	0.0	3.9	5.1	5.1	4.9	4.8	5.3	4.8	4.9	4.5	5.8	4.5	4.6	4.7	4.6	4.8	4.5	4.0	4.5
19	My department's/division's IT staff respond to my requests promptly.	5.2	5.2	5.4	0.0	4.5	5.0	5.5	5.6	5.4	5.9	5.4	5.2	4.3	5.9	4.6	6.3	4.8	5.0	5.3	4.7	1.0	5.4
20	ITG staff respond to my requests promptly.	4.9	5.1	5.1	0.0	4.4	5.3	5.0	5.3	4.9	5.2	5.0	5.0	4.6	5.7	4.5	5.1	4.7	4.8	4.7	4.5	4.0	4.8

# Survey Questions (cont.)

## APPENDIX

C

Ques #		Overall Average	Administration	Community and Economic Development	Congressional Delegation	Corrections	Court System	Educational and Early Development	Environmental Conservation	Fish and Game	Governor's Office	Health and Social Services	Labor and Workforce Development	Law	Legislature	Lt. Governor's Office	Military and Veterans Affairs	Natural Resources	Public Safety	Revenue	Transportation and Public Facilities	University of Alaska	Other
21	I receive good PC support.	5.2	5.0	5.5	0.0	4.4	5.1	5.4	5.5	5.3	5.5	5.3	5.3	4.2	5.8	4.4	6.2	4.9	5.0	5.4	4.9	3.0	5.3
22	I understand which services my department's/division's IT staff offer.	4.6	4.7	5.1	0.0	4.2	4.9	4.9	4.7	4.6	4.9	4.6	4.6	4.0	5.7	4.6	5.4	4.5	4.1	4.9	4.4	5.0	5.0
23	I understand which services ITG offers.	3.7	4.4	4.0	0.0	3.6	4.3	3.6	3.2	3.4	3.6	3.5	3.7	3.1	4.5	3.4	3.9	3.2	3.5	3.9	3.5	4.0	3.7
24	I understand how State-wide technology-related decisions are made.	2.7	3.2	2.9	0.0	2.4	3.1	2.8	2.5	2.5	3.4	2.6	2.6	2.4	3.2	2.8	2.5	2.5	2.5	2.9	2.6	n/a	2.7
25	I am sufficiently represented in State-wide technology-related decision-making processes.	2.9	3.4	3.1	0.0	2.3	3.0	3.0	2.8	2.9	3.5	3.0	2.6	2.4	3.5	4.0	2.7	2.9	2.7	3.1	2.7	n/a	2.6
26	The State's overall technology-related decision-making processes are effective.	3.6	3.9	3.9	0.0	2.9	3.8	3.9	3.7	3.7	3.9	3.6	3.5	3.2	4.3	4.0	3.3	3.6	3.4	3.8	3.5	n/a	3.1
27	The State invests adequately in IT.	3.8	3.7	4.1	0.0	2.8	3.6	4.2	4.0	4.0	3.6	3.9	3.9	3.1	4.5	3.8	3.5	3.7	3.3	3.8	3.9	n/a	3.9
28	IT investments are fairly distributed.	3.6	3.6	3.8	0.0	2.8	3.4	3.8	3.7	3.6	3.8	3.6	3.6	2.9	4.3	3.5	3.0	3.4	3.2	3.7	3.6	n/a	3.8
29	The ITG chargeback model is clear.	2.7	3.2	2.6	0.0	2.3	3.3	2.6	2.2	2.3	2.6	2.7	2.7	2.5	3.5	3.5	2.2	2.5	2.7	3.1	2.7	n/a	2.6
30	I receive value from my department's/division's IT services.	4.9	4.9	5.2	0.0	3.7	4.8	5.4	5.4	5.1	5.4	4.9	5.0	4.1	6.0	3.8	6.0	4.8	4.5	5.1	4.5	n/a	4.9

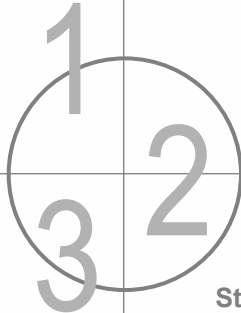
# Survey Questions (cont.)

## APPENDIX

C

Ques #		Overall Average	Administration	Community and Economic Development	Congressional Delegation	Corrections	Court System	Educational and Early Development	Environmental Conservation	Fish and Game	Governor's Office	Health and Social Services	Labor and Workforce Development	Law	Legislature	Lt. Governor's Office
31	I receive value from ITG services.	4.3	4.7	4.5	0.0	3.5	4.5	4.4	4.6	4.0	5.0	4.2	4.4	4.0	5.3	3.7
32	The State's computing environment is up-to-date.	4.1	4.0	4.6	0.0	3.0	3.6	4.4	4.5	4.4	3.7	4.2	4.2	3.4	5.0	4.0
33	My network connection is fast enough to meet my needs.	4.9	4.7	4.9	0.0	2.9	5.4	5.2	4.9	4.8	4.8	4.9	5.1	4.6	5.3	4.4
34	The computer systems I use are well integrated.	4.7	4.5	5.0	0.0	3.6	4.3	4.9	5.0	4.8	4.5	4.8	4.7	4.4	5.4	4.4
35	Mobile computing (e.g. field automation) meets my needs.	3.7	3.7	4.0	0.0	3.0	3.9	4.0	3.9	4.1	3.5	3.4	3.9	3.2	4.3	4.3
36	I can easily access the State's computer systems remotely (e.g. at home on the road).	3.8	4.1	4.2	0.0	3.3	3.6	4.4	3.9	3.9	4.2	3.4	3.9	3.8	4.1	4.7
37	Overall I am satisfied with how the State provides and supports information technology.	4.5	4.6	4.9	0.0	3.6	4.3	5.0	4.9	4.7	4.8	4.5	4.6	3.8	5.3	4.4

Assessment



Strategy  
Development

Implementation  
Planning

CIO rationale



# CIO Rationale

## APPENDIX

## D

**This appendix describes the rationale for creating the Office of the Chief Information Officer for the State of Alaska. It also presents governance models with attendant roles and responsibilities typical of this office.**

**The topics addressed include:**

- ◆ **Why a chief information officer (CIO)?**
- ◆ **Typical roles and responsibilities of a CIO**
- ◆ **Factors that determine the success of CIOs**
- ◆ **Current trends in IT governance**
- ◆ **Examples of state governance models<sup>1</sup>**
- ◆ **Selected resources**

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<sup>1</sup> SOURCE: *Enterprise Architecture Development Tool-Kit*, published by NASCIO, November 30, 2001

# [ Why a Chief Information Officer? ]

## APPENDIX

## D

**To reap the benefits of information technology in providing services, many organizations have recognized the need for a level of leadership and focus that goes beyond anything provided in a technical support function. A chief information officer (CIO) fills this role.**

### **Value added by a CIO:**

- ◆ **Acts as information management leader and an active participant in the development and implementation of IT strategic plans and enterprise-wide IT policies**
- ◆ **Helps build a credible IT organization – linking business objectives with performance measures and making key contributions to the organization's mission**
- ◆ **Centralizes IT budgeting – increasing accountability for enterprise-wide IT spending**

## **Why a Chief Information Officer? (cont.)**

### **APPENDIX**

### **D**

- ◆ **Coordinates IT procurement and project management – capitalizing on synergies and economies of scale, and implementing mission-critical information technology projects within scope, schedule, and budget**
- ◆ **Sets technology architecture and security standards – facilitating the sharing of information and strengthening the security of the state’s computer and information network**
- ◆ **Champions projects, initiatives, and systems – improving service delivery and reducing the cost of services by the appropriate application of technology**

# [ Typical Roles and Responsibilities of a CIO: ]

## APPENDIX

## D

**The following is a summary of research to date regarding typical roles and responsibilities of a CIO in the public sector. CIOs tend to hold a wide range of responsibilities depending on the size, structure, and legislative requirements of the governmental body. The most common responsibilities of a state government CIO are listed below:**

- ◆ **Advises the Governor and the cabinet on information technology policy, including policy on the acquisition and management of information technology and resources**
- ◆ **Assesses, recommends, and implements information technology governance and organization design to include effective information technology personnel management practices**
- ◆ **Integrates information technology and resources plans with agency business plans**
- ◆ **Oversees shared (multi-departmental) information technology resources and services**

## [ Typical Roles and Responsibilities of a CIO (cont.): ]

### APPENDIX

### D

- ◆ **Serves as the focal point and representative for the state in information technology and related areas with both the public and private sector**
- ◆ **Establishes appropriate partnerships and alliances to support the effective implementation of information technology projects in the state**
- ◆ **Identifies information technology applications that should be state-wide in scope, and ensures that these applications are not developed independently or duplicated by individual state agencies of the executive branch**
- ◆ **Establishes performance measurement and benchmarking policies and procedures**
- ◆ **Prepares annual reports and plans concerning the status and result of the state's specific information technology plans and submits these annual reports and plans to the governor and the legislature**

# CIO Success Factors:

## APPENDIX

## D

**Our research identified certain factors necessary for the success of a CIO. These factors address critical organizational and operational aspects of the CIO's role. Critical factors determining whether a CIO succeeds in an organization include:**

- ◆ **Alignment – the CIO needs the active support and commitment at the highest levels of the enterprise to avoid becoming isolated and tangential to the business**
- ◆ **The involvement of the senior executive management of the organization (i.e., the governor and the cabinet) is critical in developing a culture that:**
  - Includes the CIO in senior-level decision-making
  - Values the role of IT in service delivery
- ◆ **Credibility – the CIO must establish the IT organization as a key player in the enterprise**
- ◆ **Execution – the judicious development, structuring, and use of technology and human capital by the CIO to meet the needs of the enterprise**

**The following pages list the actions necessary under each category to maximize the success of CIOs**

# CIO Success Factors: Alignment

## APPENDIX

## D

The alignment of IT with enterprise business direction can be achieved by:

- ◆ Ensuring executive leadership and commitment for the CIO organization, both at the career and political levels
- ◆ Positioning the CIO as a senior management partner (i.e., a cabinet-level position)
- ◆ Identifying organizational needs and hiring a CIO with the appropriate background and skill set
- ◆ Clearly defining the CIO's role and authority
- ◆ Including the CIO in the executive decision-making process
- ◆ Adopting mechanisms and structures that facilitate an understanding of information technology and its impact on the organization's overall strategic direction
- ◆ Emphasizing returns and metrics that clearly link the IT organization with the enterprise's business needs
- ◆ Focusing technology initiatives on creating value and providing the information needed by internal and external customers

**These actions recognize the role of information technology in creating value, and position the CIO for success**

# CIO Success Factors: Credibility

## APPENDIX

## D

**Promote organizational credibility by:**

- ◆ **Permitting the CIO to have a legitimate and influential role in leading top managers to apply IT to meet business needs**
- ◆ **Assuring that the CIO has the commitment of line management and its cooperation and trust in carrying out IT projects and initiatives**
- ◆ **Requiring the CIO to:**
  - Effectively lead IT
  - Establish effective working relationships with all arms of the organization and external stakeholders
  - Accomplish quick, high-impact, and visible IT successes in balance with longer term strategies
  - Partner with customers and peers
- ◆ **Linking performance measures with business objectives and engaging internal and external customers and partners in identifying and defining measures**
- ◆ **Continuously improving the performance management structure**

**The above ensures the credibility of the IT organization, measures success, and demonstrates results**



# CIO Success Factors: Execution

## APPENDIX

## D

**Execution of information management responsibilities by the CIO requires:**

- ◆ **Clearly communicating the IT organization's responsibilities in meeting business needs**
- ◆ **Reassigning IT staff as needed to best serve interests of customers**
- ◆ **Structuring the organization along business lines as well as IT functional areas, with enough flexibility to adapt to changing business needs**
- ◆ **Maintaining up-to-date professional skills among staff**
- ◆ **Outsourcing or contracting for services as needed**
- ◆ **Developing innovative ways to attract and retain talent**
- ◆ **Providing training, tools, and methods for skilled IT professionals to perform their duties**

**The above ensures IT is organized and staffed appropriately to meet business needs**

# [ Current Trends in IT Governance ]

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**The following is a summary of our research into the current trends in public sector IT governance:**

- ◆ **A majority (approximately 40) of state governments have CIOs:**
  - Most of the CIOs are cabinet members and a governor's principal technology advisor
  - Most of the CIOs do not have day-to-day operational responsibilities for the organization's IT infrastructure (e.g., Missouri, Arkansas, North Carolina)
  - Most CIO positions are within a state IT department (e.g., Washington), some are under the administrative services department (e.g., Pennsylvania, Georgia), others are in separate agencies within the governor's office (e.g., Kentucky)
  - Most CIOs have authority to review and approve large-budget IT projects and are required to periodically report on the status of these projects to the legislature
  - In most cases, the CIO is responsible for formulating and implementing state-wide IT policies and procedures, project management methodologies, IT architecture, data management standards, and the strategic IT management plan
  - In some states, geographic information system (GIS) coordination is also the responsibility of the office of the CIO

# [ Current Trends in IT Governance (cont.) ]

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- ◆ **A majority of states oversee the IT function with some form of governing board (usually called a commission or committee):**
  - Most of the boards provide review and approval of enterprise standards and policies
  - Some boards act in a purely advisory capacity
  - In most cases, the CIO serves as the chair or leader of the board, setting its agenda per statutory guidelines
  - On some boards, the CIO is a voting member, but is not the chair or leader
  - In a few cases, the CIO's role is limited to that of a non-voting member or advisor
  - In some states several specialized sub-groups overseeing such issues as digital government and special projects support the high-level oversight boards
  - Most boards include representatives from all three branches of government
  - Several boards also include elected officials, and representatives from the public education system, local government, and the private sector

**The state IT governance models presented on the following pages could serve as examples of what has worked for other states as Alaska updates and implements its own State-wide IT decision-making model**

# Examples of State Governance Models

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### The State of Missouri – Information Technology Governance Model

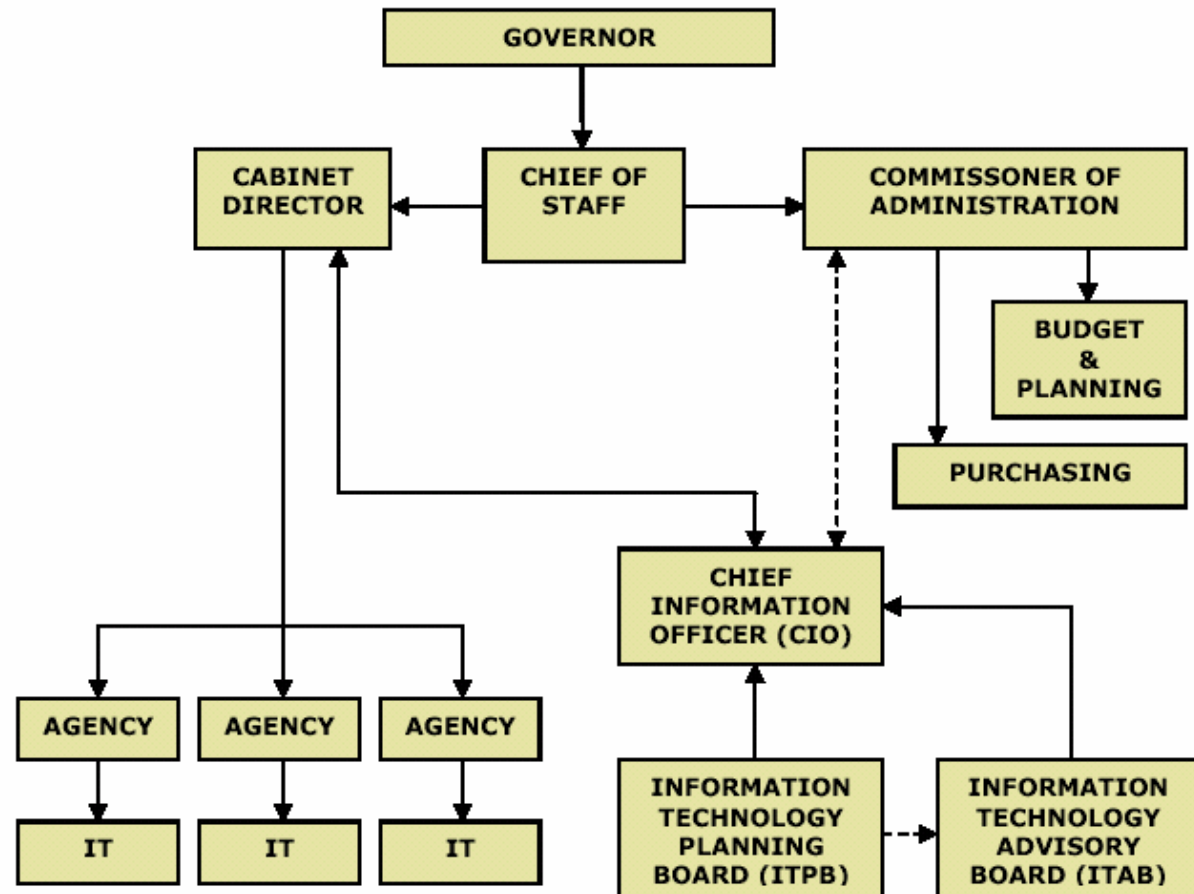
#### SIGNIFICANT ELEMENTS

**CIO** - Reports to the Cabinet. Has no operational responsibility. Drives architecture and the links to strategic plans. Has IT project approval for large budget projects and supports the budget and appropriation process on behalf of other agencies.

**ITPB** - Consists of selected department directors and provides access to cabinet. Provides business strategies for IT and acts as steering committee for ITAB. Critical in promoting CIO initiatives.

**ITAB** - Consists of the department level CIOs or IT directors. Implements strategic plans and develops IT strategies. Critical to endorsing CIO initiatives. Functions as the key contact with project stakeholders. Staff many of the committees for policy and standards.

**BUDGET AND PLANNING/PURCHASING** - Reports to Commissioner of Administration. Strategic in formulating purchasing and budgetary policies for IT.



# Examples of State Governance Models

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### The Commonwealth of Kentucky – Information Technology Governance Model

#### SIGNIFICANT ELEMENTS

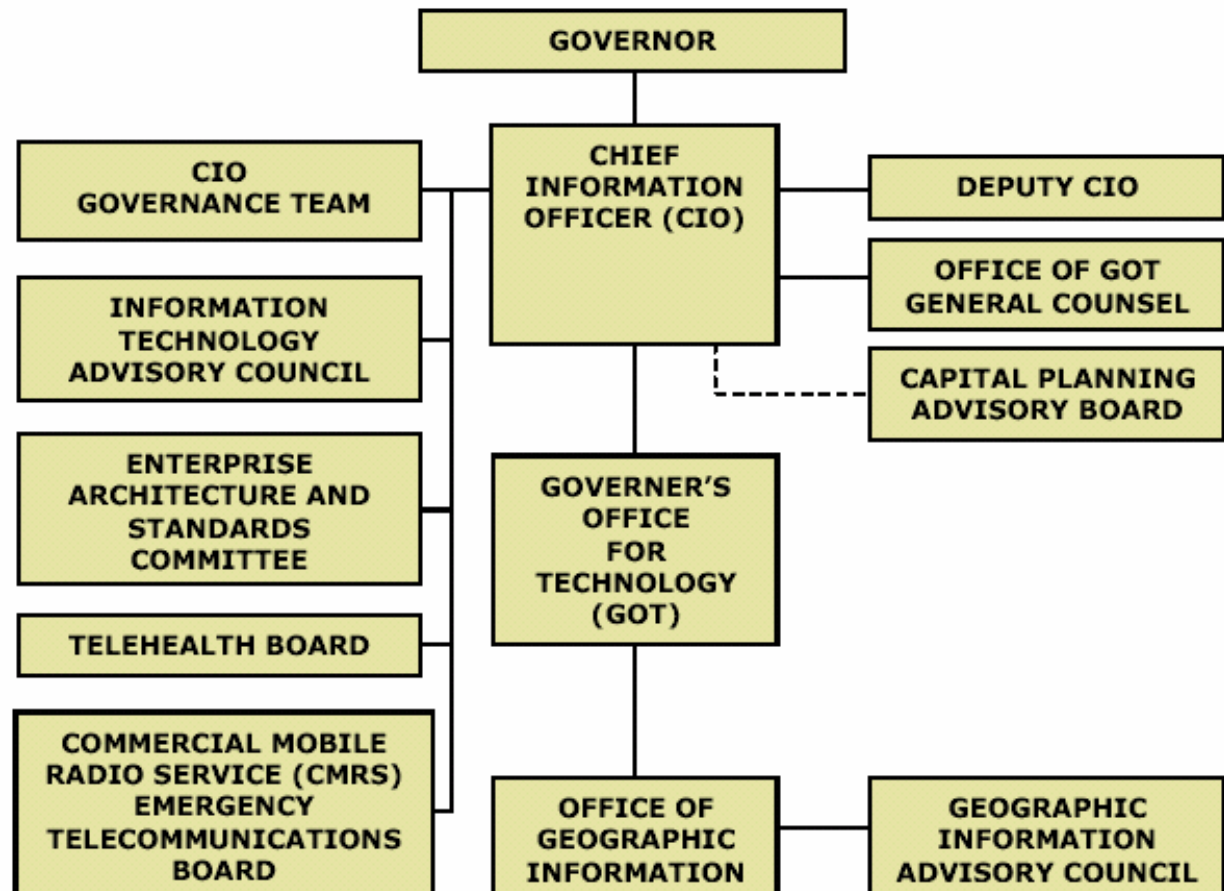
**CIO** – Responsible for developing, implementing and managing strategic information technology directions, standards and enterprise architecture, including implementing necessary processes to ensure full compliance with those directions, standards and architecture.

**ENTERPRISE ARCHITECTURE AND STANDARDS COMMITTEE** – Chaired by the CIO. Composed of multiple agency representatives and is administered and supported by the Division of Planning and Architecture, Governor's Office for Technology. Responsible for governing the architecture and standards process.

**CIO GOVERNANCE TEAM** – Formed by the CIO (not required by statute). Represents all agency CIOs. Operates as the IT policy and investment board.

**INFORMATION TECHNOLOGY ADVISORY COUNCIL** – Advises the CIO on IT issues.

**GEOGRAPHIC INFORMATION ADVISORY COUNCIL** – Advises the CIO on IT issues relating to geographic information.



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# Examples of State Governance Models

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### The State of Arkansas – Information Technology Governance Model

#### SIGNIFICANT ELEMENTS

**STATE EXECUTIVE CIO** – Directs the formulation of policies, standards and guidelines for IT in the state; reports to the Governor

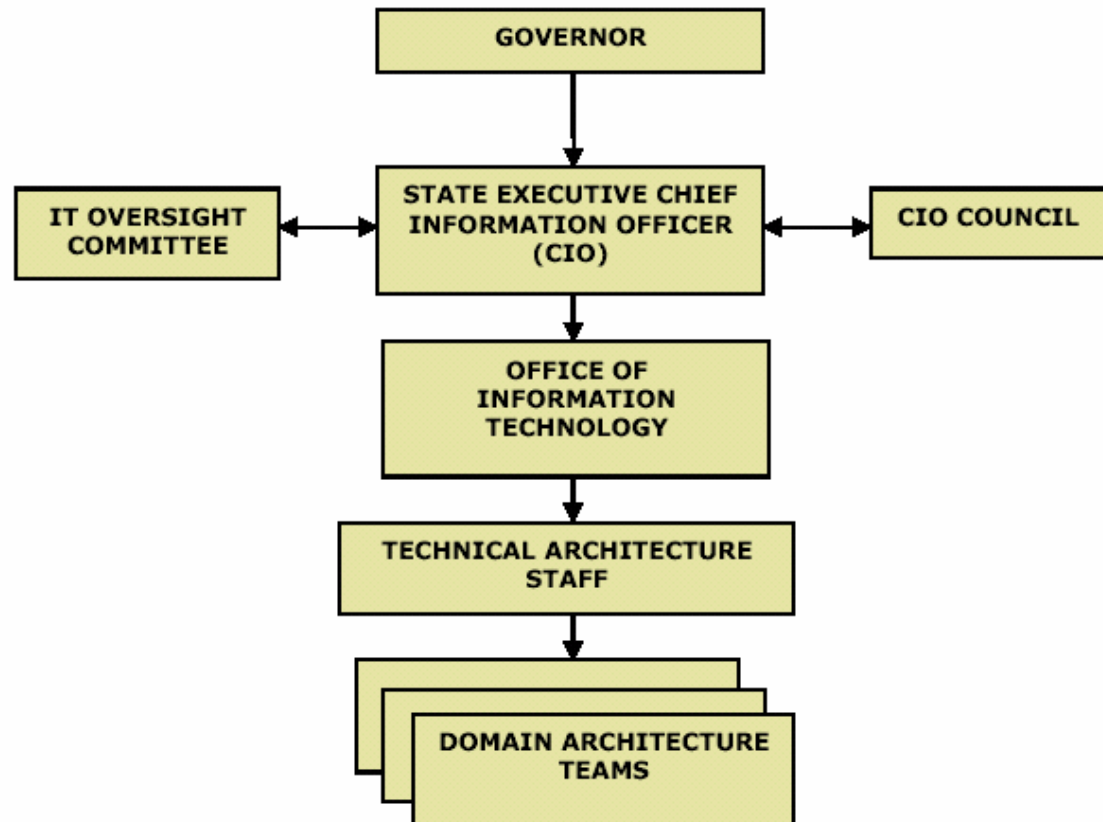
**CIO COUNCIL** – Provides leadership in coordinating information technology in the state; made up of agency CIOs

**IT OVERSIGHT COMMITTEE** – Committee of private and public entities to advise executive CIO on allocation of information technology resources used by the state

**OFFICE OF INFORMATION TECHNOLOGY** – Acts as CIO's staff; oversee agency IT planning and review; administer enterprise projects; ensure IT project alignment with state technical architecture; houses technology investigation center; houses state GIS office

**TECHNICAL ARCHITECTURE STAFF** – Work under the direction of the state executive CIO within the Office of Information Technology; facilitate domain architecture teams

**DOMAIN ARCHITECTURE TEAMS** - Business and technical staff from state agencies who research and come to consensus on standards, best practices and policies



# Examples of State Governance Models

## APPENDIX

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### The State of Kansas – Information Technology Governance Model

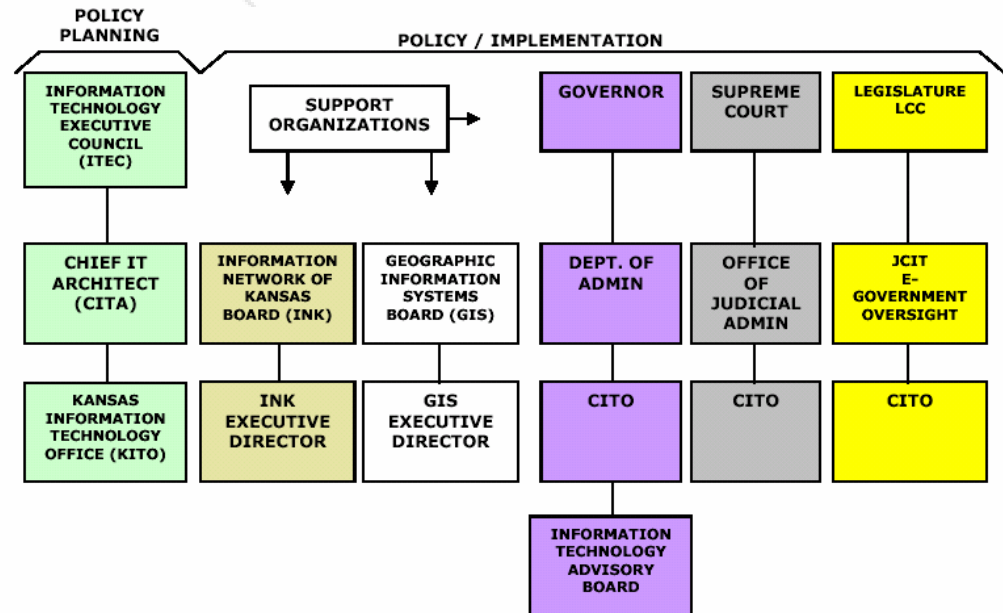
#### SIGNIFICANT ELEMENTS

**ITEC** – Responsible for adopting information technology resource policies and procedures and project management methodologies for all state agencies/offices; an enterprise information technology architecture, including telecommunications systems, networks and equipment, that covers all state agencies/offices; standards for data management for all state agencies/offices; and a strategic information technology management plan for the state.

**CITA** – Non-voting member of the ITEC. Develops and recommends information technology resource policies and procedures and project management methodologies for all state agencies/offices; an information technology architecture, including telecommunications systems, networks and equipment, that covers all state agencies/offices; standards for data management for all state agencies/offices; and a strategic information technology management plan for the state.

**CHIEF INFORMATION TECHNOLOGY OFFICER (CITO)** – Responsible for implementing information technology resource policies and procedures and project management methodologies; an information technology architecture, including telecommunications systems, networks and equipment; standards for data management; and the strategic information technology management plan for the requisite branch of government. CITO also approves all projects and bid specifications over \$250,000. Every quarter the CITO reports the status of projects.

**ITAB** – Functions as a technical resource to the CITO for the executive branch.





# Examples of State Governance Models

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### The State of Washington – Information Technology Governance Model

#### SIGNIFICANT ELEMENTS

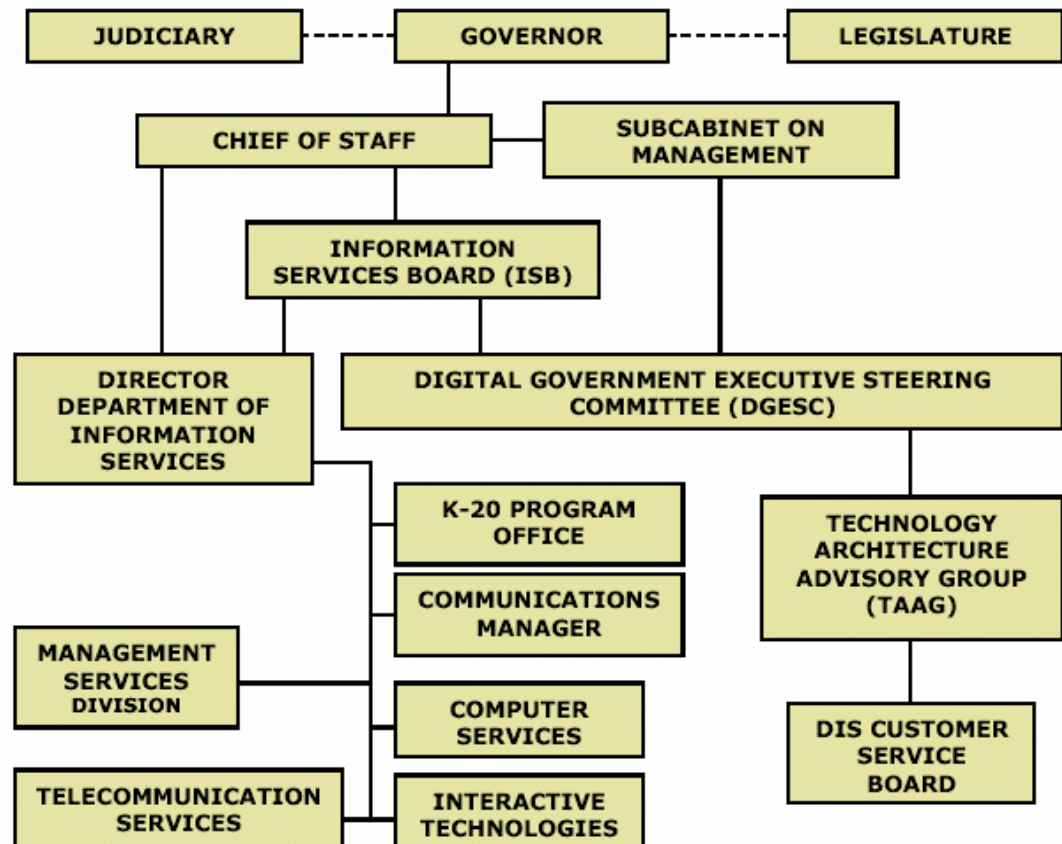
**CIO** – The Director of the Department of Information Services is the CIO for Washington

**ISB** – Establishes IT policy, direction, IT plans and technology standards.

**DGESC** – Membership includes the Office of the State Treasurer, Office of the Secretary of State, Office of the State Auditor and Office of Financial Management. Provides enterprise-wide business policy guidance, recommendations, issue resolution and coordination to achieve the goals of the digital government program.

**TAAG** - Makes recommendations to the DGESC regarding technical requirements, tool selection and objectives for e-commerce infrastructure and services, including design of electronic authorization technologies, access control and directory services. The TAAG also participates in the development of digital government policy, standards and guidelines. This group is composed of senior level agency IT managers drawn from the DIS Customer Service Board.

**DIS CUSTOMER SERVICE BOARD** – Provides technical expertise and guidelines for digital government; coordinates and supports interagency communications; develops and implements new technology infrastructure and services; advises on funding to support agency digital government services; and provides staff support to the ISB.



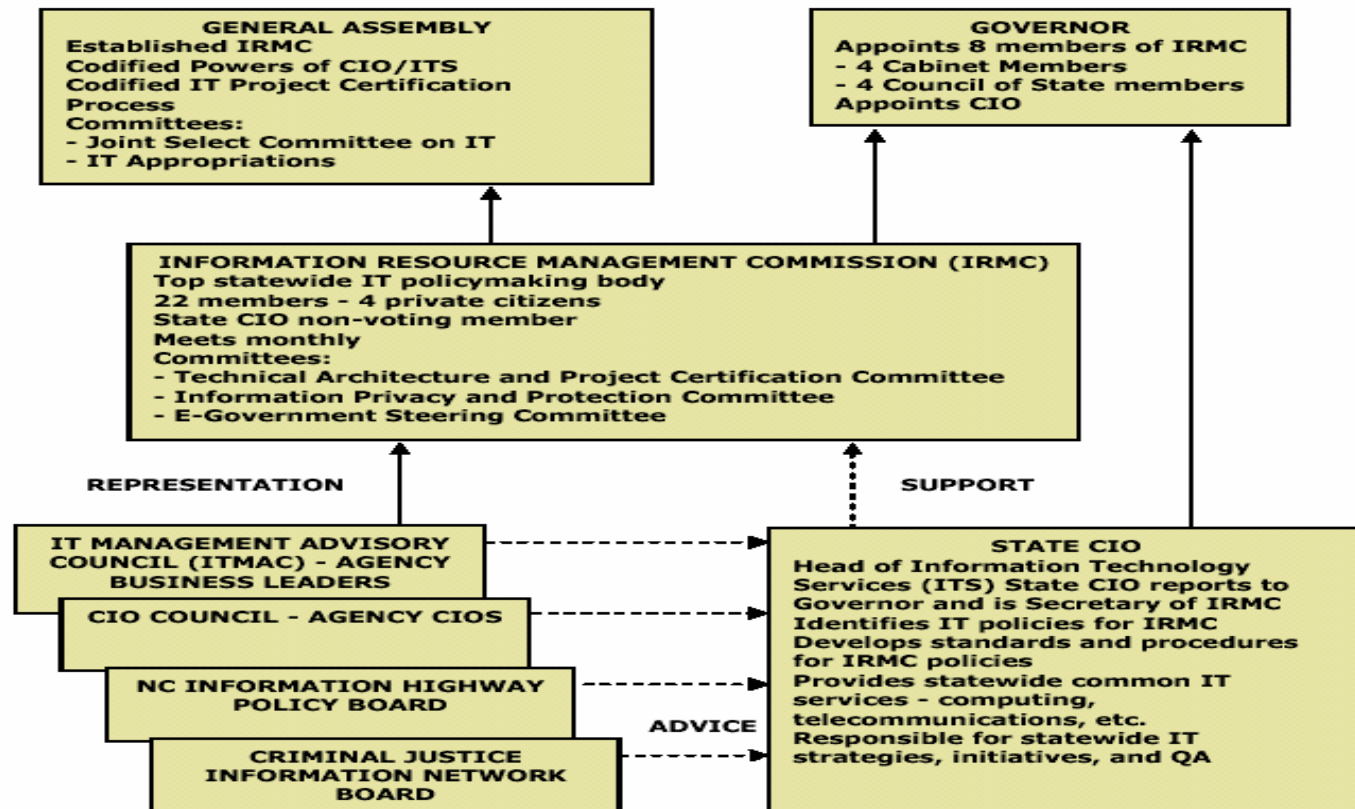


# Examples of State Governance Models

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### The State of North Carolina – Information Technology Governance Model



## Selected Resources

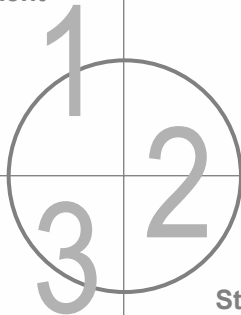
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The following is a brief list of potentially useful sources of information regarding IT governance on the Web:

- ◆ <http://www.nascio.org> – The website of the National Association of State Chief Information Officers
- ◆ <http://www.gao.gov/special.pubs/ai00083.pdf> – The GAO's report on tools, structure, etc., needed to maximize the success of the CIO, exposure draft published in March 2000
- ◆ <http://www.state.ky.us/kirm/strpln.htm> – The Commonwealth of Kentucky Strategic Information Technology Plan (SITP)
- ◆ <http://www.oit.state.pa.us/oaoit/cwp/view.asp?a=182&Q=72726&oaoitPNav=|1787|#1788> – State of Pennsylvania IT Strategy and Guiding Principles
- ◆ <http://www.nascio.org/awards/index.cfm> – 2001 NASCIO Award winners, a potential list of benchmarks for State-wide agencies
- ◆ <http://www.itgi.org/overview.htm> – The IT Governance Portal's overview of enterprise IT governance
- ◆ <http://www.centerdigitalgov.com/center/customresearch.phtml> – The Center for Digital Government, a potential source of data and/or research
- ◆ <http://www.states.org> – A clearing house for information on state information infrastructure strategies and activities

Assessment



Strategy  
Development

Implementation  
Planning

**business  
function model**

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Appendix E:  
 Business Function  
 Model

## WHAT IS A BUSINESS FUNCTION MODEL?

A *business function model* identifies and graphically displays, in a structured format, the activities an organization performs to meet its business objectives. Each of the activities shown in a business function model becomes a potential candidate for automation. The model, therefore, serves as a template for driving an organization's overall approach to automating its business functions.

It is important to distinguish between a function model and an organization model. *An organization model depicts an enterprise's structure, typically in hierarchical fashion. A business function model depicts what an organization does*, independent of organizational structure.

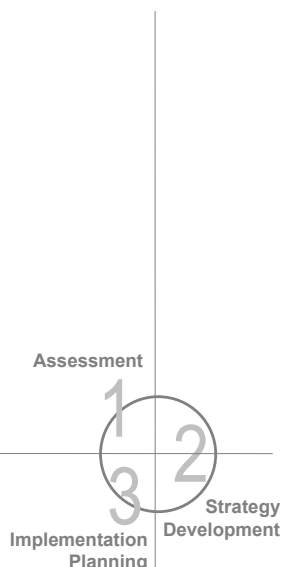
Business functions tend to be much more stable than organizational units. Organizations typically change over time to accommodate changes in how an enterprise does its work. The business functions themselves remain relatively unchanged, unless the business significantly alters its mix of services and/or products. Each function depicted in the business function model can be broken down into levels of sub-processes. These sub-processes can be analyzed and re-designed to improve efficiency.

## DIAGRAMMING CONVENTIONS

Business function models contain two primary components:

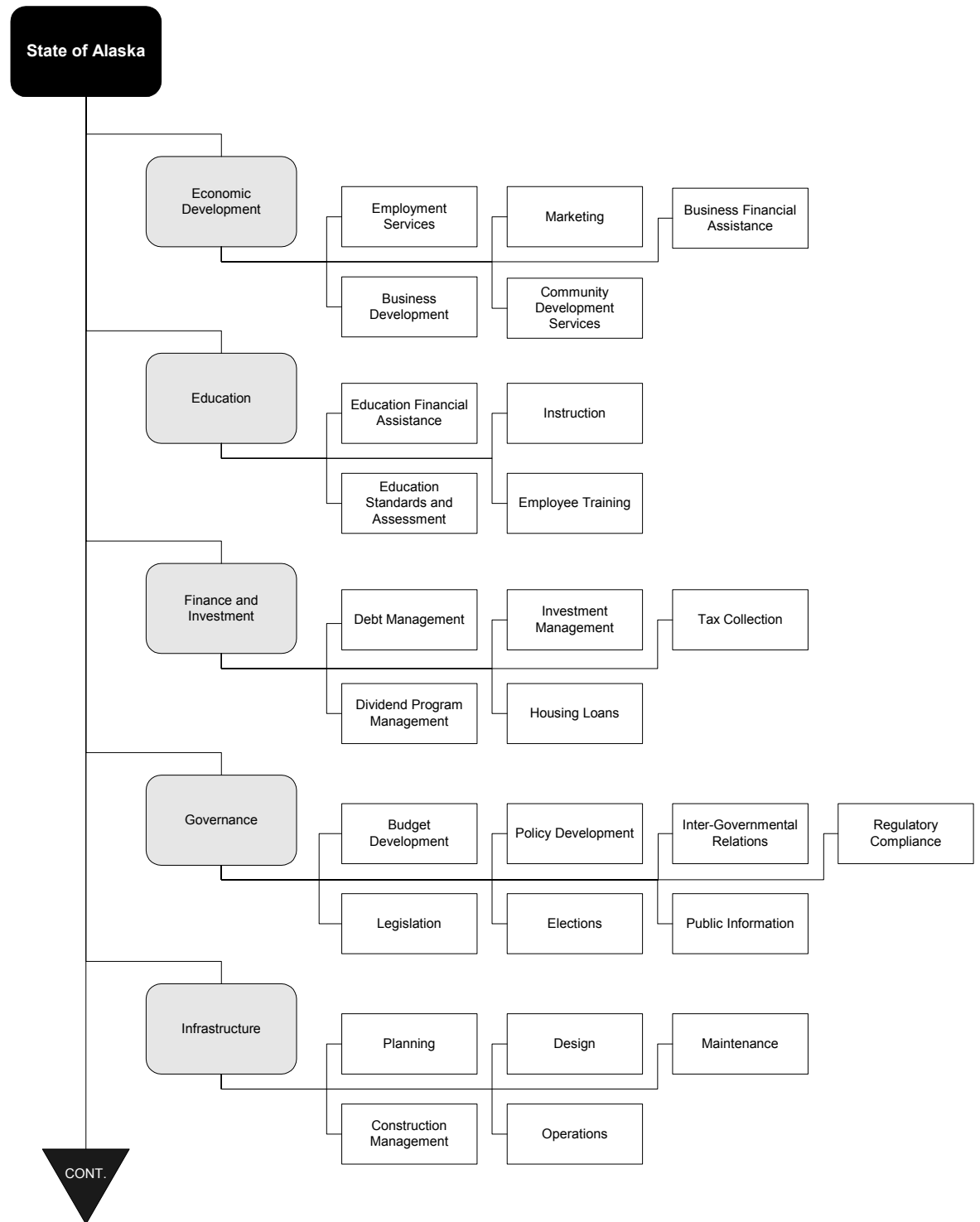
- ◆ **Functional Areas** - the major categorization of all tasks required to conduct business (e.g., "Governance" is a functional area)
- ◆ **Functions** - a group of ongoing activities which, together, completely support one functional area (e.g., "Budget Development" is a subordinate function within the "Governance" functional area)

The diagram on the following pages depicts a function model of the State's business developed by the project's steering team in a workshop facilitated by Pacific Technologies. The "roundtangles" represent functional areas. The rectangles connected to the right of the roundtangles represent subordinate business functions. Please note that the order in which the functional areas and functions are listed does not imply any precedence or dependence.



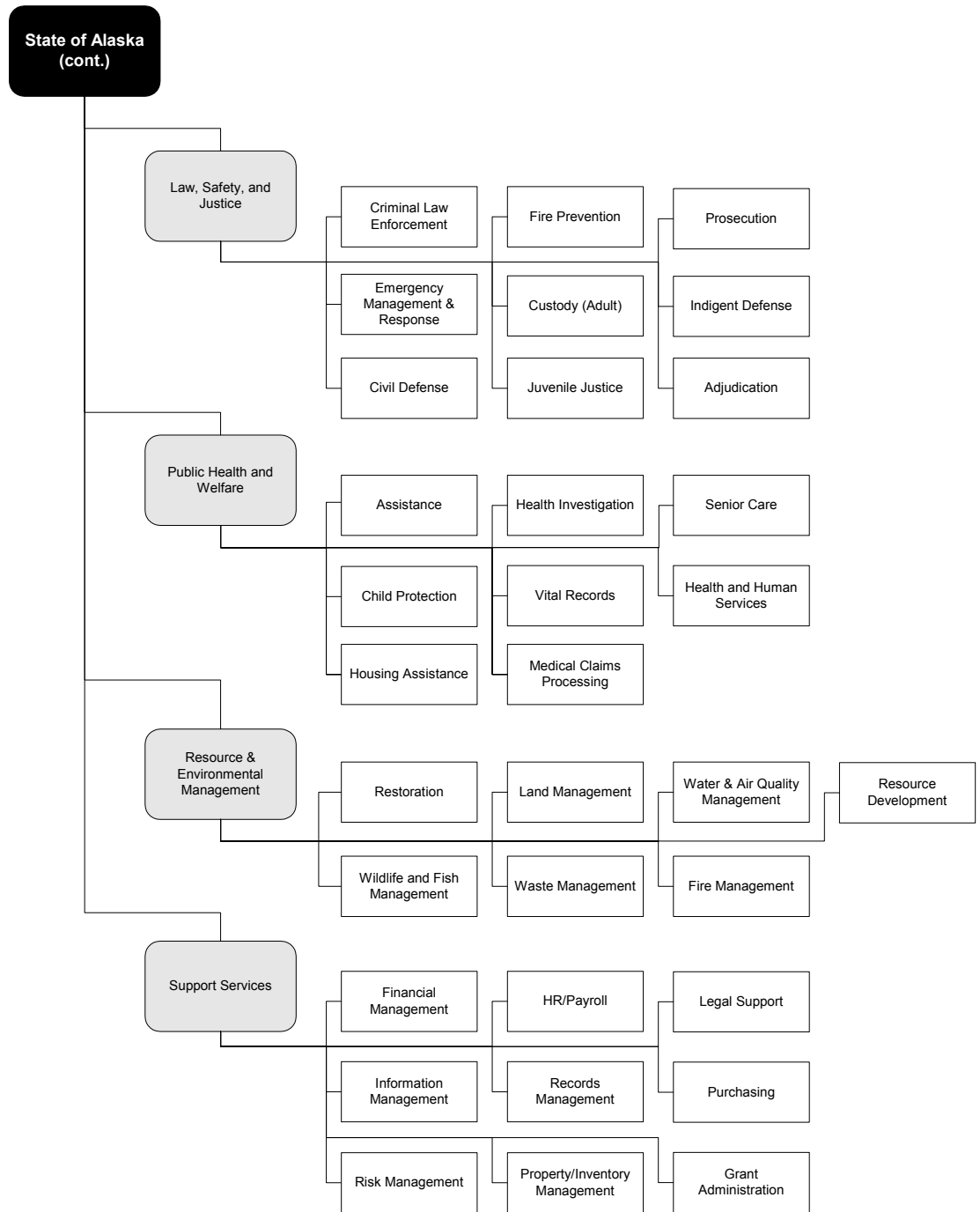
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## FUNCTION MODEL DEFINITIONS

### ECONOMIC DEVELOPMENT

Those functions related to the growth of a healthy Alaska economy and strong communities.

#### EMPLOYMENT SERVICES

The processes related to helping Alaskans seeking jobs and Alaskans seeking workers find each other.

#### MARKETING

The processes related to the promotion of Alaska's resources, products, services, and business and investment opportunities.

#### BUSINESS FINANCIAL ASSISTANCE

The processes related to administering and servicing direct State loans; and providing loan guarantees, loan participations, and bonding for development projects.

#### BUSINESS DEVELOPMENT

The processes related to assisting the retention and expansion of Alaska businesses and the establishment of new businesses in Alaska.

#### COMMUNITY DEVELOPMENT SERVICES

The processes related to providing financial and technical assistance to communities, nonprofit corporations, and public utilities.

### EDUCATION

Those functions related to the funding of instruction and school facilities, provision of student instruction, establishment of curriculum standards and student assessment requirements, and enhancement of skills for State employees.

#### EDUCATION FINANCIAL ASSISTANCE

The processes related to providing funding to local school districts and the University of Alaska for student instruction and facility construction and maintenance.

#### INSTRUCTION

The processes related to the education of students by the University of Alaska.

#### EDUCATION STANDARDS & ASSESSMENT

The processes related to the establishment of curriculum standards and testing of students to ensure that the standards have been met in order to graduate from high school.

#### EMPLOYEE TRAINING

The processes related to providing continuing education and skill development to improve the productivity of State employees.



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## **FINANCE & INVESTMENT**

Those functions related to the management of state investments and debt, revenue collection, and certain payments and loans to individuals.

### **DEBT MANAGEMENT**

The processes related to the issuance, management and payment of state debt obligations.

### **INVESTMENT MANAGEMENT**

The processes related to managing the state's financial assets, including cash and various types of financial instruments.

### **TAX COLLECTION**

The processes related to the collection of taxes, royalties, and other revenues, including the resolution of disputes on amounts owed to the state.

### **DIVIDEND PROGRAM MANAGEMENT**

The processes related to payment of Permanent Fund Dividends to Alaska residents, including determination of eligibility for dividends.

### **HOUSING LOANS**

The processes related to providing housing loans to Alaska residents.

## **GOVERNANCE**

Those functions related to State-wide leadership, communication, and oversight.

### **BUDGET DEVELOPMENT**

The processes related to preparing annual operating and capital budgets for the State of Alaska, including submission of the Governor's proposed budgets and consideration and passage of final budgets by the Legislature.

### **POLICY DEVELOPMENT**

The processes related to the evaluation of policy options, selection of preferred policies, and the implementation of policies through the budget process and administrative action.

### **LEGISLATION**

The processes related to the development, consideration, and passage of State statutes and constitutional amendments.

### **ELECTIONS**

The processes related to conducting State-wide elections for elected officials, initiatives and constitutional amendments.

### **INTER-GOVERNMENTAL RELATIONS**

The processes related to communications and interaction with other governmental organizations, including international, federal and local government officials and agencies.

### **PUBLIC INFORMATION**

The processes related to communicating with and providing information to the public on the operations of State government.





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**REGULATORY COMPLIANCE**

The processes related to the enforcement of State laws and regulations, including licensing, registration, permitting and inspections, and enforcement of banking, securities, corporations, and insurance statutes and regulations.

**INFRASTRUCTURE**

Those functions related to the physical architecture that the State builds and maintains on the public's behalf, including buildings and facilities, roads, rail, communications and transportation systems.

**PLANNING**

The processes related to strategy, needs forecasting and needs assessment, public input, budgeting, scheduling, and development of infrastructure projects.

**DESIGN**

The processes related to answering the needs raised during the planning process, involving detailed blueprints for bringing infrastructure projects to fruition.

**CONSTRUCTION MANAGEMENT**

The processes related to building the infrastructure called for in the design processes, including the management of State staff and contracting vendors.

**OPERATIONS**

The processes related to the ongoing management of the infrastructure built during the construction management process.

**MAINTENANCE**

The processes related to the repairs and replacement required for keeping the State infrastructure functioning in a safe and efficient manner.

**LAW, SAFETY AND JUSTICE**

Those functions related to the protection of lives and property, enforcement of laws, and providing for dispute resolution and legal services for the State of Alaska.

**CRIMINAL LAW ENFORCEMENT**

The processes related to providing safety to the community through patrol, investigation, and specialized services.

**FIRE PREVENTION**

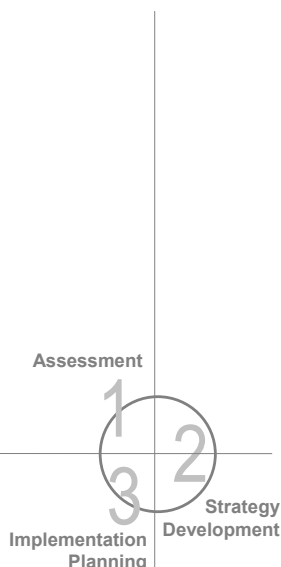
The processes related to code enforcement, education and training and arson investigation. Also process related to scheduling and inspecting buildings and businesses.

**EMERGENCY MANAGEMENT AND RESPONSE**

The processes related to organization and dissemination of information to assist appropriate agencies and citizens in coordinating and managing preparedness for natural and manmade disasters. Also, the processes related to responding to disasters.

**CUSTODY (ADULT)**

The processes related to provision of safe, secure, and humane detention facilities for inmates, thus protecting inmates, staff, and the community. Also, includes processes related to ancillary services including transportation of inmates, medical services, and probation.



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**PROSECUTION (CIVIL AND CRIMINAL)**

The processes related to reviewing, filing, and arguing criminal cases before the court and representing the State in civil matters, and responding to civil suits.

**INDIGENT DEFENSE**

The processes related to representing those in criminal matters that are unable to pay for their own defense either by contracting or other means.

**JUVENILE JUSTICE**

The processes related to protecting and restoring communities and victims by detaining juveniles while holding juvenile offenders accountable for correcting their behavior.

**ADJUDICATION**

The process related to assessing fines, reading disposition of civil and criminal cases, conducting trials, managing juries, recording court room activities, and distributing results.

**CIVIL DEFENSE**

The processes related to providing a military force that fulfills State and federal missions and that is capable of protecting life and property, preserving peace and order, and enhancing public safety.

**PUBLIC HEALTH AND WELFARE**

Those functions related to promotion and protection of the health and well-being of Alaskans.

**ASSISTANCE**

The processes related to providing cash (or equivalent) assistance to the poor or those eligible in the State of Alaska, including Food Stamps, WIC, ATAP, APA, Unemployment Insurance and Longevity Bonus.

**HEALTH INVESTIGATION**

The processes related to providing the public with protection from infectious disease including epidemiological services, lab analysis, and on going health follow-up.

**CHILD PROTECTION**

The processes related to providing protection to children who are abused and neglected or at risk of abuse and neglect.

**VITAL RECORDS**

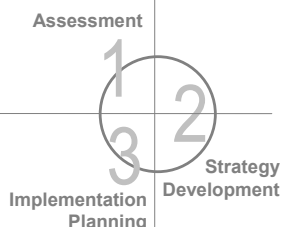
The processes related to the issuance and storage of records about people, including birth, death, marriage, adoption, and divorce.

**SENIOR CARE**

The processes related to providing services to the elderly, including pioneer homes, home care services and adult day care.

**MEDICAL CLAIMS PROCESSING**

The processes related to providing medical coverage for the poor.



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**HEALTH AND HUMAN SERVICES**

The processes related to providing mental health services, and drug and alcohol counseling, rehabilitation, and prevention services; services for emotionally disturbed children; and support for the developmentally disabled.

**HOUSING ASSISTANCE**

The process related to provision of energy assistance, rehabilitation, weatherization, housing loans, and public provision of housing.

**RESOURCE AND ENVIRONMENTAL MANAGEMENT**

Those functions related to the management of the State's natural resources and the environment.

**RESTORATION**

The processes related to restoring damaged resources including pollution prevention and response.

**LAND MANAGEMENT**

The processes related to managing land usage in the State.

**AIR & WATER QUALITY MANAGEMENT**

The processes related to maintaining and improving air and water quality in the State, including the prevention of various types of pollution.

**WILDLIFE & FISH MANAGEMENT**

The processes related to managing the fish and wildlife resources of the State for subsistence, recreational and commercial uses consistent with the sustained yield principle.

**WASTE MANAGEMENT**

The processes related to protecting the State's land, water, and air from the impacts of human, industrial, and other wastes.

**RESOURCE DEVELOPMENT**

The processes related to managing the State's surface and subsurface resources.

**FIRE MANAGEMENT**

The processes related to fire protection and suppression on State lands.

**SUPPORT SERVICES**

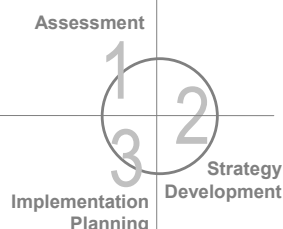
Those functions related to providing essential assistance in support of all State governmental services.

**FINANCIAL MANAGEMENT**

The processes related to the fiscal affairs of the State of Alaska including Accounts Receivable & Payables, Budget, Treasury, Fixed Assets and General Ledger.

**HR/PAYROLL**

The processes related to the recruitment, classification, retention and pay of State of Alaska employees, including those processes related to time sheet information; to administration of their compensation and benefits; the negotiations of labor agreements, and the tracking and reporting of taxes and deductions in accordance with all federal and State labor laws and agreements.



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**INFORMATION MANAGEMENT**

The processes related to the planning, acquisition, implementation, operation, management and maintenance of computer and telecommunication systems and providers, including all video, radio and electronic data systems used by the State of Alaska.

**RECORDS MANAGEMENT**

The processes related to the storage, retrieval and management of State of Alaska documents; including the recording of documents, provision of public access to documents, fee collections and document preservation by imaging.

**LEGAL SUPPORT**

The processes related to advice on law, litigation and prosecution.

**PURCHASING**

The processes related to ordering and receipt of goods and services.

**RISK MANAGEMENT**

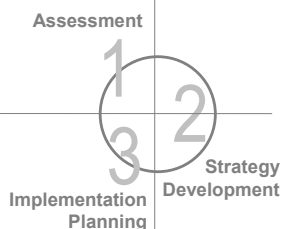
The processes related to identification and prevention of risk, to containment, management and final disposition of risk and to the insurance against risk.

**PROPERTY/INVENTORY MANAGEMENT**

The processes related to inventory tracking and maintenance of the State's assets and facilities and to the processes related to disseminating information about these assets and facilities.

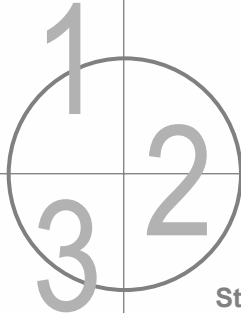
**GRANT ADMINISTRATION**

The processes related to identifying, acquiring, recording, managing, monitoring and compliance with funding awards received or owed; also the management of and processes related to State awards to Alaskan entities to conduct and provide key services to Alaska.



## APPENDIX **F**

Assessment



Strategy  
Development

Implementation  
Planning

[ gap analysis

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Appendix F:  
 Gap Analysis

This document summarizes Pacific Technologies' analysis of the gaps between "ideal" applications and the corresponding applications currently in use by the State of Alaska. In some cases, no current application corresponding to the "ideal" exists at all. In those instances, the gap results from the complete absence of the required functionality.

**The applications reviewed during this engagement are restricted to those which could be used to support business activities on an enterprise-wide or multi-function (i.e., more than one business functional area) basis. Applications which are specific to departmental, divisional, or agency activities were not assessed to determine gap.**

The following section provides a representation of the gap analysis work sheet that explains its contents. Pacific Technologies completed one work sheet for each ideal application. The remainder of this appendix contains the detailed gap analysis for each ideal enterprise-wide application.

Application Name	
<b>Ideal Application Description:</b>	The description of the application from the ideal application architecture.
<b>Benefits:</b>	The expected benefit to be gained from the ideal application.
<b>Existing Applications:</b>	The name(s) of existing applications that provide functionality in this area.
<b>Gap Analysis Summary:</b>	<p>A description of gaps in the ability of existing application(s) to support necessary business processes. Areas investigated include:</p> <ul style="list-style-type: none"> <li>◆ Functionality – The ability of existing applications to support necessary business processes</li> <li>◆ Ease of Use – Issues with regard to comprehensibility and usability of the corresponding applications</li> <li>◆ Data Sharing – The ability of the corresponding existing applications to provide flexible access to data</li> <li>◆ Standardization – The level of standardization of data formats, programming languages, and platforms of the corresponding existing applications</li> </ul>
<b>Overall Gap Assessment:</b>	<p>A rating of the level of current automation support as compared to that supplied by the ideal application:</p> <ul style="list-style-type: none"> <li>◆ "Minimal" indicates a well automated application</li> <li>◆ "Moderate" indicates that some gap exists</li> <li>◆ "Severe" indicates that the existing applications do not automate the function well, or that no application exists</li> </ul>



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Appendix F:  
 Gap Analysis



Asset Management	
<b>Ideal Application Description:</b>	This application tracks inventory, history, and expenses related to all major State-owned assets throughout their lifecycle, from acquisition to disposal. Calculates depreciation. Supports periodic physical audits of asset inventory. Tracks warranty information, movement, and lease and rental information. Supports complete reporting on all assets. Supports barcoding. Supports links to Financial Management and Maintenance Management.
<b>Benefits:</b>	Increases cost efficiency through the measurement and management of asset expenditures. Allows State to more efficiently manage its assets.
<b>Existing Applications:</b>	Property Management System (DOA); Equipment Inventory (DEC); Employee Inventory (DCED)
<b>Gap Analysis Summary:</b>	The Property Management System is not a true asset management application; rather, its functions are restricted to inventory. The DEC and the DCED have implemented applications locally to track equipment and items issued to employees.
<b>Overall Gap Assessment:</b>	<u>Severe</u>

Automated Mapping/Spatial Analysis (GIS)	
<b>Ideal Application Description:</b>	This application efficiently captures, stores, updates, manipulates, analyzes, and displays all forms of geographically referenced information. It provides an accessible, coherent set of information about the State's geospatial entities.
<b>Benefits:</b>	Allows users to view and locate most of the State's infrastructure. Supports geo-based analysis of the State's related information.
<b>Existing Applications:</b>	ESRI ArcInfo, ESRI ArcGIS, ArcSDE, ArcView, ArcIMS, AutoCAD (DOT) ; AutoDesk Mapguide (DNR)
<b>Gap Analysis Summary:</b>	State departments are using industry-leading GIS software for development and distribution of maps and GIS analysis. Although the State as a whole could benefit from a coordinated approach to GIS development and data collection, there is no coordinated effort in place.
<b>Overall Gap Assessment:</b>	<u>Moderate</u>

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Contract Management	
<b>Ideal Application Description:</b>	This application manages contract relationships. Functionality includes contract tracking, accounting, and maintenance. It can also facilitate the contract purchasing process, including tracking change orders, managing critical dates in the contracting process, and supporting compliance requirements. Monitors vendor performance during the life of the contract. The ability to track progress allows the State to manage payments on a progress basis.
<b>Benefits:</b>	Better contract monitoring, work performance, and compliance. Provides State-wide access to contract information.
<b>Existing Applications:</b>	LAA Contracts System (Legislative Branch)
<b>Gap Analysis Summary:</b>	There is no State-wide implementation of contract management software.
<b>Overall Gap Assessment:</b>	<u>Severe</u>

Document Management	
<b>Ideal Application Description:</b>	This application allows for the automated control of documents, electronic or otherwise, throughout their life cycle at the State, from initial creation through final archiving and destruction. Functions include document identification and search capabilities, workflow support, application of record retention rules, storage and retrieval, tracking, and version control.
<b>Benefits:</b>	Provides greater control over the production, storage, distribution, and archiving of State documents. Yields greater efficiencies in the ability to reuse information, and reduces document production time. Provides improved security/access control, including better control over the legal discovery process.  Reduces errors by helping to ensure that only one version of a document remains current at any time and that all concerned parties have the latest approved revisions and/or releases. Reduces loss of documents.
<b>Existing Applications:</b>	Micrographics (Courts); LLS Imaging (Legislative); DISCFS (DOR); Imaging (Law); Laserfiche (DOA); PaperClip (DNR)
<b>Gap Analysis Summary:</b>	The need for document management functionality at the State has been handled at the departmental level with a variety of software packages, with varying levels of functionality. It is not clear whether it would be advisable to attempt a State-wide approach to document management, due to the many potentially incompatible requirements of the various departments (e.g., different document sizes).
<b>Overall Gap Assessment:</b>	<u>Severe</u>



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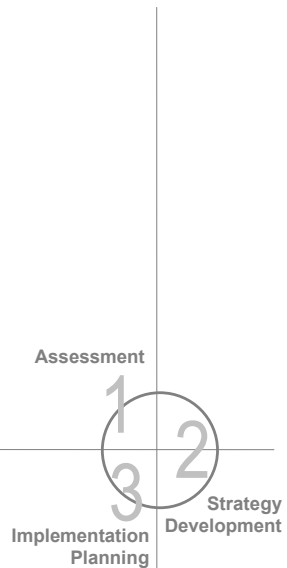
<b>e-Government (Internet)</b>	
<b>Ideal Application Description:</b>	This application (or group of applications) provides access to government functions and information via the Internet. Published information can be automatically updated. Accepts payment and accommodates e-signature technology. Links to many systems, including Maintenance Management, Financial Management, GIS, Human Resources, and Permit Management.
<b>Benefits:</b>	Provides an alternative point of access for customers. Greatly simplifies task of transacting with State entities, especially when the customer is located at some distance from State offices. Automates many functions of government. Reduces need for staff to field phone calls by increasing ability of public to find information. More timely information updates. Allows 24 hour access to State services.
<b>Existing Applications:</b>	AKJobs, Index of Legal Decisions, ES Self Registration (DOL); Workplace Alaska (DOA); Tax Forms, PFD Filing, KIDS, Guideline Calc (DOR); Licensing Online, Clearinghouse Online, Licensing Forms, Strategic Planning Input Form, Habitat Permit Violations Form, etc. (ADFG); Grant Program Information, Epidemiology Report Forms, Feedback Form (DHSS); Public POMS, BASIS, Gavel-to-Gavel (Legislative Branch); Flag Order, Email the Governor, Mailing List (Office of the Governor); CIIMS (DEC/DNR); ASDGC, Land Records, Recorder, UCC Search, Land Administration System, MCIS, Forms (DNR)
<b>Gap Analysis Summary:</b>	Alaska has managed to offer a great deal of information and service to the public via the Web. However, the State's website suffers from a lack of coordination and a disjointed "look and feel." Navigation and graphic design elements vary widely as a user moves from department to department. There is no State-wide approach to digital signatures and authentication of users of the website.
<b>Overall Gap Assessment:</b>	<u><b>Moderate</b></u>



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Email/Calendar	
<b>Ideal Application Description:</b>	This application provides the State with a standardized tool for electronic communications and scheduling. Capabilities include integration with the personal productivity suite, flexible resource assignment, and Internet email. Allows individuals to access other staff's schedule information.
<b>Benefits:</b>	Reduces "paper trail" of memos and communications. Facilitates distribution of information to staff. Improves scheduling efficiency and coordination.
<b>Existing Applications:</b>	Novell GroupWise, MS Exchange, Enterprise Email System, Netscape Mail, MS Outlook, FirstClass, ccMail, AcmeMail, SquirrelMail, Steltor CorporateTime, Governor's Scheduling, Lt. Governor's Scheduling, OnTime.
<b>Gap Analysis Summary:</b>	A variety of systems and clients are in place at the State. The ITG supports a centralized messaging system that is used by approximately 8,000 out of the approximately 12,000 State email accounts. Netscape Mail and MS Outlook are the officially "sanctioned" email clients. The ITG also offers the Steltor CorporateTime calendar system, which is used by approximately 600 staff.
<b>Overall Gap Assessment:</b>	<u>Moderate</u>



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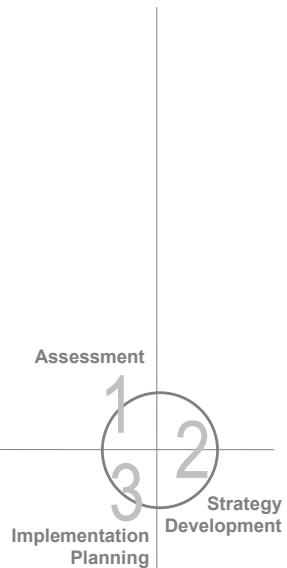


Financial Management/Payroll	
<b>Ideal Application Description:</b>	This application supports the recording, management, reporting, and analysis associated with the State's assets and liabilities. It includes support of accounts payable, accounts receivable, payroll, purchasing treasury, debt tracking, cashiering, activity based costing, capital project management and cost accounting, timekeeping/labor distribution and all levels of budget development. It also allows "what-if" analysis, and supports forecasting based on user input combined with trend analysis.
<b>Benefits:</b>	More timely and accurate information about the State's financial position. Improved access to information. Enables the State to flexibly structure financial operations and accounts to meet diverse reporting requirements. Improved budget tracking.
<b>Existing Applications:</b>	AKSAS/AKPAY/ABS (DOA); IFAS (APFC); Expenditure Tracking, Budget, Pre-Auditing (Fish & Game); Great Plains Dynamics (DCED)
<b>Gap Analysis Summary:</b>	<p>The State obtains its financial management and payroll functionality from two applications that reside on the mainframe, AKSAS and AKPAY. The AKPAY system was procured in 1990 and is likely reaching the end of its useful life – 10 years is typical for finance/payroll systems. The State is out of compliance with its vendor support agreement, pending the upgrade of the software to the "98 Release," which the Department's staffing levels and workload have not yet permitted. Modifications to the software, which are necessitated by the reality of constantly changing Federal and State government requirements, are extremely time-consuming, due to the inflexible nature of the software's architecture. Furthermore, the application will need to be converted to a different database (from ADABAS to DB2), as the vendor is dropping support for the ADABAS environment beyond the 98 Release. Reporting from the system is basically unavailable on an ad-hoc basis.</p> <p>AKSAS, the State's financial management package, was implemented in 1985. At seventeen years old, it is also a likely candidate for replacement. The technology is "green-screen," and lacks the customizability that users who are accustomed to Windows-based applications have come to expect. While still sturdy, functional, and generally modifiable (the State owns the source code), the system lacks adequate budget analysis and projection capabilities, requiring detailed budgetary analysis to be done using spreadsheet tools.</p> <p>Both of these packages rely on technologies which are increasingly difficult to support, as these skills are rarely taught in technical schools and universities (and when they are, tend not to attract students, due to their obsolescence). Meanwhile, State staff that possess these skills are retiring from the workforce.</p> <p>Various departments are relying on local implementations of additional accounting software components as well. It should be noted that, although the State procured the ABS budget package relatively recently, it is highly likely that any replacement to the current financial management and payroll systems would include budget functionality which would supplant ABS.</p>
<b>Overall Gap Assessment:</b>	<u>Severe</u>

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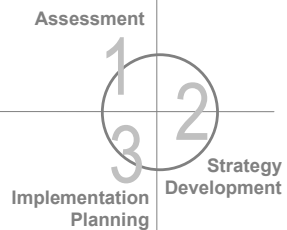
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Grant Management	
<b>Ideal Application Description:</b>	This application manages the State's grant relationships from the initial opportunity through development, award, execution, and closure. It also tracks grant beneficiaries, funding, and automates regulatory reporting. Includes a link to Financial Management.
<b>Benefits:</b>	Maximizes revenue base and facilitates the most appropriate disbursement of funds. Tracks data necessary to ensure appropriate use of funds. Ensures compliance with regulatory agencies.
<b>Existing Applications:</b>	FileMaker Pro (DMVA); Excel (Education, DOL); Access 97/SQL Server (DHSS); MicroEdge Gifts (DOA)
<b>Gap Analysis Summary:</b>	Grants are tracked and reported on by stand-alone applications and spreadsheets. No uniform process is in place, at least partially due to the statutory exemption to grants from the procurement code. Current systems do not support publication of grants information (e.g., history, grantee fund availability, etc.) to the Web for public view. Users opinions of the different software packages vary.
<b>Overall Gap Assessment:</b>	<u>Moderate</u>



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Human Resources	
<b>Ideal Application Description:</b>	This application provides online processing and maintenance of employee records. It stores current and historical data related to demographics, academic and professional credentials, compensation, benefits, assignments, attendance, etc., and reporting on these attributes. It supports training, recruiting, labor contract negotiations, grievance tracking, regulatory compliance, safety compliance, and environmental mandates related to State employees. Allows for employees to access information about themselves and perform some transactions without the assistance of specially trained staff. Interfaces with Payroll, Timekeeping, and Financial Management.
<b>Benefits:</b>	Provides “one-stop-shopping” for retrieving employee data. Eliminates redundant data entry, decreasing inconsistencies among systems and effort required to maintain system. Facilitates summary reporting for long-term human resources decision making. Automates the recording of an individual’s training hours, licenses, and certifications. Reduces staff workload by allowing employees to review their own records with appropriate security.
<b>Existing Applications:</b>	AKPAY; Personnel (Fish & Game); Personnel (DCED); agency.mdb, staff.mdb (Legislative); Personnel (DOR); CSED Personnel Database (DOR); Personnel (DOL); Personnel (DPS); Employee System (Governor’s Office)
<b>Gap Analysis Summary:</b>	No true HR system exists at the State. Current employee data is kept, to a certain extent, in the payroll system. Reporting capability of this system is said to be unsatisfactory. There is no central repository for training and certification information. Many departments rely on their own implementations of an HR system, and platforms range from Access to Oracle.
<b>Overall Gap Assessment:</b>	<u>Severe</u>

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Licensing	
<b>Ideal Application Description:</b>	This application processes various license applications (e.g., business, general contractor, etc.). Generates license forms and renewal notices. Tracks delinquent notices and generates documentation to inform customers of delinquencies. Provides management information about the business community. Provides Web access to application forms and online submission capabilities. Integrated with Financial Management.
<b>Benefits:</b>	Improved tracking and overall management of State's license-related relationships. Ensures appropriate and timely collection of licensing fees.
<b>Existing Applications:</b>	CFEC Licensing, various licensing apps (Fish & Game); Insurance Companies System, Insurance Licensing System, Architects/Engineers/Land Surveyors/Licensing System, Business License System, Contractors Licensing System, Generic Licensing System, Real Estate Appraisers System, Real Estate Commission System, Medical System, Nursing System, (DCED); Alcohol License (DOR)
<b>Gap Analysis Summary:</b>	As Licensing was not identified as a key enterprise application until late in the project, Pacific Technologies did not perform a review of State licensing applications.
<b>Overall Gap Assessment:</b>	<u><b>Moderate [as identified by client]</b></u>

Management Reporting	
<b>Ideal Application Description:</b>	This application provides the State with a single source for critical data. It reports on key management performance measures on a regular schedule. Interfaces with most management systems, including Financial Management, CIS, and Maintenance Management.
<b>Benefits:</b>	Efficiently automates the generation of management information, obviating the need for time consuming custom reporting. Improves operational decision-making.
<b>Existing Applications:</b>	Crystal Reports 7/8; CDD Report Writer (APFC); PwC GENEVA (DOA)
<b>Gap Analysis Summary:</b>	A variety of report-writing tools are in use to support the variety of reporting needs of different users. Many departments are users of Crystal Reports, a market leading reporting tool. In 1993 the DOA enhanced the reporting capabilities of AKSAS with the addition of GENEVA, 4 <sup>th</sup> generation reporting tool. Ad hoc reporting from the payroll system is still considered unsatisfactory by users.
<b>Overall Gap Assessment:</b>	<u><b>Severe</b></u>

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Personal Productivity	
<b>Ideal Technology Description:</b>	This standardized suite of desktop software tools provides word processor, spreadsheet, presentation, and document publishing and exchange.
<b>Benefits:</b>	Allows for convenient internal file sharing and communication with external sources. Serve as “shadow” applications to support custom and packaged applications. Generally allows State staff to focus on doing their work as opposed to how they do it.
<b>Existing Applications:</b>	Microsoft Office 95, Microsoft Office 97, Microsoft Office 2000, Microsoft Office XP; Corel WordPerfect
<b>Gap Analysis Summary:</b>	The State has successfully standardized on a single suite of personal productivity applications. There are a few instances of WordPerfect still in use for word processing, and some older versions of the Office Suite that should be retired due to the increasing lack of compatibility with more contemporary upgrades.
<b>Overall Gap Assessment:</b>	<u>Minimal</u>

Permit Management	
<b>Ideal Application Description:</b>	This application supports the entry and tracking of permit, inspection, and code compliance data, and issues permits. It supports calculation and management of impact fees and credits, tracks information specific to specialized permit issuance such as fire prevention, hazardous materials and pyrotechnics, schedules inspections, and tracks results. Supports State code enforcement activities. Includes a GIS interface and a link to Financial Management for billing, cost recovery, and payment of credits. Takes advantage of GIS resources to locate properties and retrieve related information. Also supports an interface to CAD to transmit safety-related permit information to public safety response personnel. Supports coordination of permit activities among State departments.
<b>Benefits:</b>	Integrates and streamlines permit processing from initial application through completed construction and maintenance of facility. Provides faster permit turnaround service to customers. Improves access to records for incident response purposes. Automates inspection scheduling.
<b>Existing Applications:</b>	Permit Assistance, WQ Permits, 404/401 Permitting (DEC); Forestry Burn Permits (DNR)
<b>Gap Analysis Summary:</b>	As Permit Management was not identified as a key enterprise application until late in the project, Pacific Technologies did not perform a review of State permitting applications.
<b>Overall Gap Assessment:</b>	<u>Moderate [as identified by client]</u>



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<b>Project Management</b>	
<b>Ideal Application Description:</b>	This application allows project managers to define, monitor, and control individual, departmental, or State-wide projects. It supports resource leveling and staff planning for proposed work as well as what-if analysis of proposed staffing changes. Additionally, it tracks the proposal, issuance, and acceptance of contracts, and monitors vendor performance during the life of the project. Includes a link to Financial Management and Maintenance Management.
<b>Benefits:</b>	Improved project management and better project planning. Better work load planning, standardized project management methodology and work breakdown structures. It also allows the project manager to track performance versus plan, making adjustments as required to stay on time and within budget.
<b>Existing Applications:</b>	MS Project 98/2000; Primavera (DCED)
<b>Gap Analysis Summary:</b>	Many instances of Microsoft Project can be found around the State. Only the Department of Community and Economic Development has a tool that can be used to aggregate and track resources across many projects and across the organization. A project management office has been established in the Department of Labor's Employment Security Division to provide project management services to the rest of the Department; the project managers are using Microsoft Project.
<b>Overall Gap Assessment:</b>	<u><b>Moderate</b></u>





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Real Property Management	
<b>Ideal Application Description:</b>	This application records, tracks and reports on financial aspects of the State's leased and owned real property. It is integrated with other State applications where appropriate. Links with Automated Mapping to show property location and physical attributes.
<b>Benefits:</b>	Ensures that financial records accurately reflect the State's asset base. Assists in maximizing revenue from property transactions. Ensures property use rights are not purchased twice. Provides management information on department-owned/managed properties.
<b>Existing Applications:</b>	Yardi (APFC)
<b>Gap Analysis Summary:</b>	No State-wide system in place at this time.
<b>Overall Gap Assessment:</b>	<u>Severe</u>

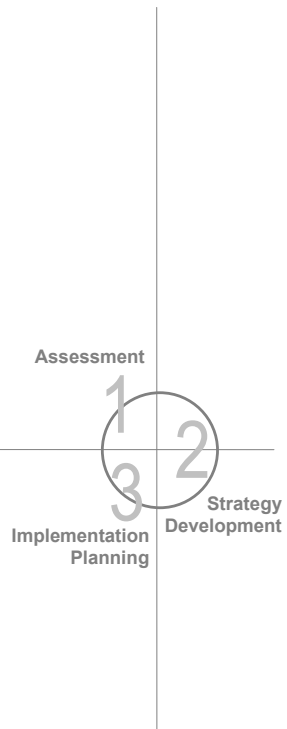
Risk Management	
<b>Ideal Application Description:</b>	This application tracks the State's risk exposure to a variety of elements – legal, labor, environmental, etc. – and facilitates self-insurance and risk brokerage.
<b>Benefits:</b>	Helps State leaders identify and mitigate potential areas of risk exposure. Reduces the amount of reserves needed for liability coverage.
<b>Existing Applications:</b>	PACCASSO (DOA)
<b>Gap Analysis Summary:</b>	The application runs on the IBM AS/400 platform, and, as is typical for such applications, is stable and reliable. The application has been purchased by another vendor (CSC) that is planning to phase out the product. The Department is interested in replacing PACCASSO with Riskmaster.
<b>Overall Gap Assessment:</b>	<u>Moderate</u>



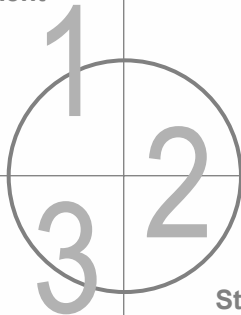
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Timekeeping	
<b>Ideal Application Description:</b>	Supports collection, validation and payroll processing for employee hours. Supports various timekeeping methods and cycles of input, such as daily, weekly, and shift-based time reporting, in both real-time and batch mode data entry. Interfaces with the State's HR/Payroll systems, Financial Management, Project Management, and Work Management.
<b>Benefits:</b>	Automates employee timekeeping. Reduces data entry for payroll.
<b>Existing Applications:</b>	Eve (Fish & Game); Timeslips (DEC); BillQuick (DEC); Javelan (Law)
<b>Gap Analysis Summary:</b>	There is no single State-wide implementation of a timekeeping application, in spite of a widely-held opinion that such a system would be of great value to the State. Departments have filled this need with a variety of applications and spreadsheets. Attempts have been made to extend departmental timekeeping solutions across the organization but have, to date, been unsuccessful.
<b>Overall Gap Assessment:</b>	<u>Severe</u>



Assessment



Strategy  
Development

Implementation  
Planning

# inventory summary

State of Alaska  
Statewide Information Technology Plan  
October 31, 2002

# [ IT Inventory ]

## APPENDIX

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- ◆ **The State participated in an IT inventory exercise as part of the planning effort**
- ◆ **Data was collected regarding the PCs, servers, and databases in use by the various State agencies and departments**
- ◆ **This appendix presents the data received, as a State-wide summary and by department**

# IT Inventory: PC/Server Summary

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- ◆ The tables to the right present a summary of PCs, servers, and operating systems in use at the State
- ◆ The data is presented as it was reported

PC Operating System	Count	Server Operating System	Count
DOS	5	BSD (Unix)	9
Linux	5	DOS	4
Mac	8	Linux (Unix)	44
OS2	3	MacOS 8.5	1
Solaris	32	Netware 3x	1
X Windows	58	Netware 4x	66
Windows 3.11	7	Netware 5x	103
Windows 95	574	OS2	1
Windows 98	1088	OS/390	1
Windows NT 4	3463	OS400	4
Windows ME	5	UNIX	21
Windows 2000	2813	Solaris (Unix)	32
Windows XP	42	Wang	1
Win95/98	106	Windows 95	1
Win9x/NT4	509	Windows NT 4	420
Win95/NT4	12	Windows 2000	135
Win95/2000	776		
Win98/2000	96		
WinNT4/2000	2337		
Win98/NT4/2000	286		
unreported	775		

# IT Inventory: Departmental Summaries

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### Department of Administration

#### **PCs**

Windows 95	33
Windows 2000	288
Windows 95/2000	776
total	<u>1097</u>

#### **Servers**

Linux	2
Netware 4x	8
Netware 5x	27
OS400	3
Windows NT 4	4
Windows 2000	9
n/a	36
total	<u>89</u>

#### **DBMS**

ORACLE  
ADABAS  
Centura 32  
DB2  
Dbase IV  
FileMaker Pro  
FoxPro  
Microsoft Access  
MS SQL Server  
Paradox  
Pervasive SQL  
VSAM

#### **Email**

#### **Calendar**

Netscape  
Steltor

### Department of Community and Economic Development

#### **PCs**

Windows 95	24
Windows 98	48
Windows 2000	367
total	<u>439</u>

#### **Servers**

BSD Unix	2
Linux	6
Netware 4x	3
Netware 5x	8
PowerVault NAS 3.1	1
Solaris	5
Windows 2000	10
total	<u>35</u>

#### **DBMS**

Oracle  
SQL Anywhere

#### **Email**

#### **Calendar**

Netscape  
Steltor

### Department of Corrections

#### **PCs**

Windows NT 4	750
total	<u>750</u>

#### **Servers**

Netware 5x	26
Windows 2000	3
total	<u>29</u>

#### **DBMS**

Informix

#### **Email**

#### **Calendar**

n/a  
n/a

# IT Inventory: Departmental Summaries

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### Department of Education and Early Development

#### **PCs**

Windows NT 4	76
Windows NT 4/2000	290
Windows 98/NT 4/2000	30
total	396

#### **Servers**

Windows NT 4	13
Windows 2000	1
total	14

#### **DBMS**

MS SQL Server

#### **Email**

Calendar

Outlook  
Steltor

### Department of Environmental Conservation

#### **PCs**

Windows 95	25
Windows 98	45
Windows ME	1
Windows NT 4	276
Windows 2000	197
Windows XP	3
total	476

#### **Servers**

Windows NT 4	26
Windows 2000	4
total	30

#### **DBMS**

FileMaker Pro  
MS Access 2000  
MS Access 97  
MS SQL Server 2000  
MS SQL Server v7  
Oracle 8i

#### **Email**

Calendar

Exchange  
Outlook

### Department of Fish and Game

#### **PCs**

DOS	2
Linux	1
OS2	3
Windows 9x	115
Windows 95	79
Windows 98	182
Windows NT 4	38
Windows ME	1
Windows 2000	199
Windows XP	6
Windows 98/2000	36
Windows 98/NT/2000	256
Windows NT 4/2000	218
total	1136

#### **Servers**

BSD Unix	5
DOS	2
Linux	5
OS2	1
Netware 4x	12
Netware 5x	16
Windows NT 4	37
Windows 2000	16
total	94

#### **DBMS**

ArcSDE  
MS SQL Server  
Oracle  
PostgreSQL  
R-Base  
SQLBase

**Email**  
Calendar

Netscape  
n/a

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# IT Inventory: Departmental Summaries

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### Governor's Office

#### **PCs**

Windows 95	211
total	211

#### **Servers**

DOS	1
Netware 4x	1
Netware 5x	12
Windows NT 4	2
Windows 2000	13
total	29

#### **DBMS**

n/a

#### **Email Calendar**

Netscape/ccMail  
OnTime

### Department of Health and Social Services

#### **PCs**

Windows 3.11	4
Windows 95	153
Windows 98	166
Windows NT 4	1285
Windows ME	2
Windows 2000	622
Windows XP	27
Windows 95/98	14
Windows 95/NT 4	12
Windows 9x/NT 4	8
Windows NT 4/2000	35
total	2328

#### **Servers**

Netware	2
Netware 3x	1
Netware 4x	6
Netware 5x	4
Solaris	3
UNIX	19
Wang	1
Windows NT 4	140
Windows 2000	19
total	193

#### **DBMS**

4th Dimension  
IBM Red Brick  
MS Access  
MS SQL Server  
MySQL  
Oracle  
Sybase  
Wang

#### **Email Calendar**

Exchange  
Outlook

### Department of Labor and Workforce Development

#### **PCs**

X Windows	58
Windows NT 4/2000	1102
total	1160

#### **Servers**

BSD	2
Windows NT 4	44
Windows 2000	18
total	64

#### **DBMS**

Btrieve  
MS FoxPro  
MS SQL Server  
Progress

#### **Email Calendar**

Exchange  
Steltor



# IT Inventory: Departmental Summaries

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### Department of Law

#### **PCs**

Windows 9x	375
Windows 2000	160
total	<u>375</u>

#### **Servers**

Netware	13
Windows NT 4	7
Windows 2000	1
total	<u>21</u>

#### **DBMS**

MS SQL Server	
Oracle	

#### **Email Calendar**

Groupwise	
Groupwise	

### Department of Military and Veteran's Affairs

#### **PCs**

Windows NT 4	75
Windows 2000	126
Windows XP	1
Windows 95/98	89
Windows 98/2000	30
total	<u>321</u>

#### **Servers**

Windows NT 4	19
Windows 2000	2
total	<u>21</u>

#### **DBMS**

FileMaker Pro	
MS Access 97	
Oracle 8	

#### **Email Calendar**

FirstClass, Exchange	
FirstClass, Exchange	

### Department of Natural Resources

#### **PCs**

MacOS	2
Solaris	26
Windows 3.11	2
Windows 95	45
Windows 98	338
Windows ME	1
Windows NT 4	40
Windows 2000	399
Windows XP	1
Windows 98/2000	30
total	<u>884</u>

#### **Servers**

DOS	1
Netware 5x	5
Solaris	19
Windows NT 4	3
Windows 2000	4
total	<u>32</u>

#### **DBMS**

FileMaker Pro	
FoxPro	
Oracle	
Paradox	

#### **Email Calendar**

Groupwise	
Groupwise	

# IT Inventory: Departmental Summaries

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### Permanent Fund Corporation

#### **PCs**

Windows 2000	50
total	50

#### **Servers**

proprietary	1
Solaris	4
Windows NT 4	11
Windows 2000	2
total	18

#### **DBMS**

n/a

#### **Email**

#### **Calendar**

Exchange  
Outlook

### Department of Public Safety

#### **PCs**

MacOS	5
Windows 95	152
Windows 98	97
Windows NT 4	29
Windows 2000	25
Windows XP	3
unreported	429
total	740

#### **Servers**

MacOS	1
Netware 4x	23
Solaris	3
Windows 95	1
Windows NT 4	8
total	36

#### **DBMS**

Access  
ADABAS  
Oracle

#### **Email**

#### **Calendar**

Netscape  
Steltor

### Department of Revenue

#### **PCs**

Solaris	2
Windows 95	3
Windows 98	306
Windows NT 4	126
Windows 2000	194
Windows XP	4
Windows 95/98	3
total	638

#### **Servers**

Netware	1
Netware 4x	1
Netware 5x	5
Solaris	3
Windows NT 4	31
Windows 2000	8
total	49

#### **DBMS**

ADABAS  
MS FoxPro  
MS Access 2000  
Oracle  
SQLBase  
Sybase Adaptive Server Enterprise  
Sybase SQL Anywhere

#### **Email**

#### **Calendar**

Netscape  
Steltor

# IT Inventory: Departmental Summaries

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### Department of Transportation and Public Facilities

#### **PCs**

DOS	3
Linux	4
MacOS 7.5	2
MacOS 8.6	1
MacOS 9.1	3
Solaris	5
Windows 3.11	1
Windows 95	1
Windows 98	3
Windows NT 4	797
Windows 2000	211
Windows NT 4/2000	253
total	1284

#### **Servers**

Linux	11
Snap OS	1
Solaris	3
Windows NT 4	34
Windows 2000	9
total	58

#### **DBMS**

Access  
Dbase 5  
FileMaker Pro  
Oracle 8  
Paradox

#### **Email Calendar**

Netscape  
Steltor

### Courts

#### **PCs**

n/a	0
total	0

#### **Servers**

UNIX	2
Windows NT 4	27
Windows 2000	26
total	55

#### **DBMS**

MS SQL Server  
Progress

#### **Email Calendar**

Exchange  
Outlook

### Legislature

#### **PCs**

Windows NT 4/2000	439
total	439

#### **Servers**

Linux	20
Netware 4x	14
Windows NT 4	14
Windows 2000	2
total	50

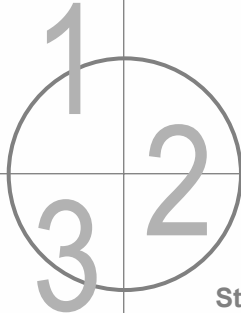
#### **DBMS**

Btrieve  
MS SQL Server  
Site Director

#### **Email Calendar**

Netscape  
Outlook

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[ state-wide IT  
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data

# State-wide IT Expenditure Data

## APPENDIX

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- ◆ The table to the right presents non-personnel IT expenditures for fiscal year 2001 on a departmental basis based on the AKSAS Geneva report
- ◆ The following pages provide additional detail regarding items included in the analysis

Account/Line Item	ITG Chargeback 73253*	Contractual 73000	Supplies 74000	Equipment 75000	Total
Governor's Office	197.4	131.5	21.6	120.4	470.9
Administration	2,665.2	1,148.6	407.8	500.3	4,721.9
Law	220.9	456.7	35.6	406.8	1,120.0
Revenue	1,983.3	310.2	107.2	186.0	2,586.7
Education & Early Development	509.4	196.7	298.2	444.8	1,449.1
Health & Social Services	2,211.3	661.2	672.0	1,961.0	5,505.5
Labor & Workforce Development	1,486.2	956.3	438.6	870.5	3,751.6
Community & Economic Development	178.7	237.4	99.8	484.8	1,000.7
Military & Veterans Affairs	12.2	138.4	173.9	112.5	437.0
Natural Resources	506.1	155.9	702.2	603.4	1,967.6
Fish & Game	438.7	403.2	480.9	827.1	2,149.9
Public Safety	880.4	951.0	179.4	249.9	2,260.7
Environmental Conservation	197.1	556.7	226.3	581.2	1,561.3
Corrections	294.2	111.1	189.0	259.2	853.5
Transportation & Public Facilities**	916.2	1,446.5	798.2	516.5	3,677.4
Legislature	171.0	116.5	142.2	1,196.4	1,626.1
Court System	313.5	2.7	5.7	262.3	584.2
<b>TOTAL</b>	<b>13,181.8</b>	<b>7,980.6</b>	<b>4,978.6</b>	<b>9,583.1</b>	<b>35,724.1</b>

Numbers in thousands

\*This account has been adjusted to include ITG chargeback costs recorded in account codes 73256 & 73289.

\*\*DOT/PF numbers include capital expenditures because of their recurring nature.

# State-wide IT Expenditure Data

## APPENDIX

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- ◆ The tables presented on this page indicate accounting line items from the AKSAS Geneva report included in the summary data provided on the previous page

Contractual Services		Next Level Roll-up
73250	Data Processing Services	Professional Services
73254	DP Operations	Professional Services
73255	DP Applications	Professional Services
73256	Other DP Services FC	Professional Services
73258	DP Professional Services	Professional Services
73370	Data Communications	Communications
73372	Dial Up	Communications
73373	Data Lines	Communications
73374	Data Connectors	Communications
73375	Data Comm FC	Communications
73784	DP Fixed Costs	Mach/Equip Repair/Maint
73795	Mainframe	Mach/Equip Repair/Maint
73796	Peripherals	Mach/Equip Repair/Maint
73797	Environmental Support	Mach/Equip Repair/Maint
73798	Network	Mach/Equip Repair/Maint
73799	Micro/Mini Computer	Mach/Equip Repair/Maint
73787	DP Equipment Repair	Mach/Equip Repair/Maint
73868	DP Fixed Costs	Mach/Equip Rentals/Leases
73876	Peripherals	Mach/Equip Rentals/Leases
73877	Environmental Support	Mach/Equip Rentals/Leases
73878	Network	Mach/Equip Rentals/Leases
73879	Micro/Mini Computer	Mach/Equip Rentals/Leases
73880	Other Rentals/Leases	Mach/Equip Rentals/Leases
73881	DP Software Pkg-FC	Mach/Equip Rentals/Leases
73882	Software Maint	Mach/Equip Rentals/Leases

Supplies		
74223	Computer Commodities	Operating Supplies
74560	Data Processing Supplies	Operating Supplies
74562	Tape Supplies	Operating Supplies
74564	Technical Library	Operating Supplies
74565	Micro Supplies	Operating Supplies
74566	Software/Non-Capital	Operating Supplies

Equipment		
75830	Data Processing Equipment	Mach/Equipment Summary
74561	Computer Software	Mach/Equipment Summary
75796	Comp Terminals/Monitors	Mach/Equipment Summary
75797	Mini/Micro Computer Systems	Mach/Equipment Summary
75831	Mainframe	Mach/Equipment Summary
75832	Peripherals	Mach/Equipment Summary
75833	Environmental Support	Mach/Equipment Summary
75834	Network	Mach/Equipment Summary
75835	Word Processing Equipment	Mach/Equipment Summary

# State-wide IT Expenditure Data: Caveats

## APPENDIX

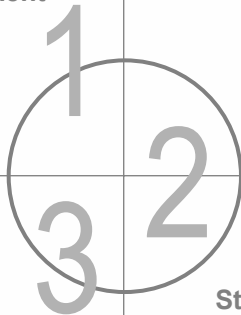
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When interpreting the preceding data, please consider the following:

- ◆ ITG chargeback expenditures were recorded using account code 73253, and are reported separately from other contractual expenditures
- ◆ The Governor's Office, Education, H&SS, DNR, and DEC used account code 73289 (RSAs) to record ITG chargeback costs. They have been included in the spreadsheet under the "ITG Chargeback 73253" column
- ◆ Only operating budget expenditures have been included, except for DOT/PF which includes significant capital expenditures that are recurring in nature
- ◆ Department of Administration contractual, supplies and equipment expenditures have been adjusted to exclude ITG division expenditures which are reported separately
- ◆ Due to a recent change in the equipment threshold to \$5,000, agencies record desktop purchases in both the supplies and equipment line items
- ◆ Contractual account codes NOT included: 73252 Contract Data Entry; 73257 Contract Microfiche; 73289 RSAs (except as noted above); 73371 Teleconference Charge; 73376 TV Costs
- ◆ Supplies account codes NOT included: 74563 Printer/Paper.
- ◆ Some IT-related costs are not be included because of account code selection (i.e., an accounting clerk could use account code 73270 Other Professional Services instead of 73258 DP Professional Services. As a case in point, the consulting services contract for this IT Plan was recorded under 73270)
- ◆ Some other miscellaneous costs may be inconsistently accounted for (i.e. some paper purchases are undoubtedly included under account code 74560 Data Processing Supplies, even though this analysis specifically excluded 74563 Printer/Paper)

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# list of participants

State of Alaska  
Statewide Information Technology Plan  
October 31, 2002



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Appendix I  
List of Participants

NAME	TITLE	DIVISION/AREA
Abbott, Rick	ISS Supervisor	DCED/Investments
Audet, David	Data Security Specialist	ITG
Baker, Laura	Program Budget Manager	HSS/DAS
Barsalon, Mike	Network Specialist	DCED
Barton, Burke	Network Specialist I	DOT/PF-SE Region
Beason, Laura	Finance Office	DEC/Admin
Blevins, David	Operations Manager	ITG
Blume, Michael	Networking	DOC/Admin
Boucher, John	ORCA Project Manager	HSS/DFYS
Brickey, Paul	Analyst Programmer V	DMV/IT
Brinkley, Sarah	Administrative Manager	HSS/DMHDD
Brongoetz, Greg	A/PV	DMHDD
Brooks, Kevin	Director of Administration	Fish and Game
Buckland, Kevin	Finance Officer	ADFG Administration
Bump, Debbie	Administrative Services Manager	Administration/Finance
Church, Stephanie	Finance Officer	Labor/ASD
Clarke, Janet	Director Administration	HSS
Clothier, Curtis	Data Processing Manager	LAA
Corey, Sheila	Analyst/Programmer	Department of Revenue
Crane, Karen	Director Education	EED/LAM
Crowder, George	IT Manager	DOT/HF/HQ
Cummins, Loren	Data Communications Specialist	ITG
Davidson, Pat	Director of Legislative Budgeting	Legislative Audit
Davis, Susan	Staff	House Finance/Legislature
Denniston, Dennis	Microcomputer Network Technician I	DOC
DeWitt, Denny	Legislative Assistant	Legislature
DiCostanzio, Carmine	Chief Computer Services Section	Fish and Game
Diebles, Jr., Bill	Analyst/Programmer v	Administration/Finance
Downs, Mike	Microcomputer Specialist	DEC
Duncan, Jim	Commissioner	DOA
Elder, Terry	Director	DCED/BSC
Elliot, Bill	Tech Support	ITG
Ellis, Bill	Network Administrator	LAA
Fell, Brian	Microcomputer Network Specialist	DCED
Fisher, Bryan	Network Administrator	DMV/DES
Fisher, Roberta	Admin Manager IV	ADF&G/CF
Garnero, Kim	Director	Administration/Finance
Glover, Gloria	Chief Examiner	DCED
Grayson, Rich	ORCA DP Manager	HSS/DFYS
Greeson, Chuck	Chief of Computer Services	ITG
Grimm, Doug	Network Specialist	DOT/PF/AMHS
Haar, Barbara	DP Manager	DEC/Admin
Hahnen, Tim	DP Manager	DCED
Harris, John	State Representative	Legislature
Haverland, Tim	Analyst Programmer	ADF&G/Commercial Fisheries
Hays, Dan	Analyst	Labor/ESD
Hooten, Shawn	Network Specialist	Legislative Audit
Henry, Anne	Special Project Coordinator	HSS/DMHDD
Isabella, Eugene	Network DP Manager	HSS/DFYS
Israelson, Ted	DP Manager	HSS/DAS

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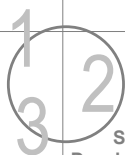
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Appendix I  
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NAME	TITLE	DIVISION/AREA
Jeans, Jeff	Procurement Specialist	Labor/ASD
Johnson, Bill	Accounts Payable	Fish and Game
Kinzie, Heather	Human Resources Manager	Environmental Conservation
Kline, Andy	IT Plan Project Manager	ITG
Kolden, Roger	Data Processing Project Leader	CFEC
Kramer, Bill	Manager ESD	Labor, Employment Security
Kreinherder, Jack	Policy Analyst	OMB/Governor's Office
Lawson, Tom	Director of Administrative Services	DCED
Lovett, Josh	DP – Network/Dev LAA	LAA
Lowe, Sharon	Administrative Manager IV	HSS/ADA
Luckey, Kevin	Network Specialist	DCED
Mannion, Joe	DP Manager	DPS
Martin, Betty	Comptroller	Treasury
McCutchen, Scott	Analyst Programmer V	HSS/DPH
McNair, Marianne	Research Analyst	ADF&G/CF
Meslar, Dave	Network Microcomputer Specialist	ADF&G
Miller, Babette	Analyst Programmer IT	DMV/IT
Miller, Maritt	Personnel Officer	ADF&G/Admin
Mitchell, Charlie	System Programmer	ITG
Mitchell, Sydney	Information Officer	Division Govt. Coordination
Monagle, John	Analyst Programmer V	Administration/DAS
Morse, Allen	Technical Services Manager	ITG
Moyer, Jan	DBA	ITG
Mulder, Eldon	State Representative	Legislature
Mungle, Jeanne	Procurement Specialist	DEC/DAS
Mushkin, Claudia	Analyst Programmer V	DPS
Myers, Michelle	Technician III	DOC/Admin
Nash, Margo	Program Officer	HSS/DPA
Noel, Mike	DP Manager	Labor/ASD
Nolan, David	Analyst Programmer IV	DMV/IT
Norvell, Monty	Admin Manager	ADF&G/HR
O'Hare, Mike	DP Help Desk – User Services	LAA
Opp, Michael	Director, ACS	Education and Early Development
Peel, Bob	Auditor Programmer	Legislative Audit
Pock, Deborah	Administrative Manager III	DEC
Prevette, Ken	MCNS II	HSS
Recktenwald, John	Analyst Programmer V	DPS
Rehfeld, Karen	Admin Services Director	Education and Early Development
Rice, Steve	Data Processing Manager	Administration/Personnel
Ridgeway, Stan	Deputy Director	DCED Insurance
Santos, Aida	Procurement	Admin/DOE
Savikko, Kurt	Division Web Master	ADF&G
Schneider, Stephen	IS Manager	Alaska Psychiatric Institute
Seng, Doug	IS Manager	HSS/DMA
Shoemaker, Anne	Audit Manager	Observer, Legislative Audit
Schoenborn, Paul	Analyst Programmer V	HSS/DPA
Shumaker, Ann	Audit Manager	Legislative Audit
Simons, Dawn	API	HSS
Snyder, Norm	DP Manager	Revenue
Southerland, Ken	Personnel Officer	DEC/HR

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NAME	TITLE	DIVISION/AREA
Stalnaker, Robert	Admin Services Manager	DEC
Stevenson, Bob	Administrative Manager	DCED/BSC
Strauch, Rebecca	Analyst/Programmer (GIS)	ADF&G – DWC
Sullivan, Tom	Network Manager	HSS/DPA
Swift, Belinda	Research Analyst III	ADF&G/CF
Talley, Larry	Mid-Tier System Manager	ITG
Taug, Karen	Administrative Officer	DGC
Taylor, Susan	Administrative Manager IV	HSS/Division of Juvenile Justice
Tihonovich, Phil	Analyst Programmer IV	DMV/IT
Varni, Pam	Executive Director	Legislative Affairs Agency
Walsh, Larry	Director	ITG-DOA
Warren, Guy	Analyst/Programmer V	Administration/Finance
Webb, Judy	Systems Support Manager	Revenue/CSED
Webster, Dorothy	Accountant V	ITG
Weiss, Edward	Habitat Biologist	ADF&G
White, Kathleen	HIPAA Coordinator	HSS/DAS
White, Sharon	Telecommunications Program Manager	ITG
Wilcock, John	LAN Administration	ADF&G/CF
Williams, Bill	State Representative	Legislature
Willis, Tom	Electronic Technician	State
Wilmot, Brad	DP Manager	Department of Corrections
Winegar, Gregg	Director	DCED/Investments
Wright, Kristen	Acct. IV	ADF&G Admin

